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ABSTRACT

A Canadian study of student orientation (integrative, instrumental, or other) and its relationship to second language learning motivation and sociocultural factors in the learning environment is discussed. The study compared the orientations and stated reasons for studying a second language of over 800 grade 11 students with data on three sociocultural factors: ethnolinguistic group (anglophone and francophone), the sociopolitical status of the target language (official French or English vs. minority Spanish), and the cultural composition of the milieu (unicultural or multicultural). The results indicate that students are motivated by several relatively specific and concrete orientations simultaneously, and that the relative importance of these several orientations varies according to the structural factors in the learning environment. The report discusses the implications of these findings for changes in current models of second language acquisition and teaching practice. (MSE)

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THE EFFECT OF CONTEXT ON THE COMPOSITION AND ROLE OF ORIENTATIONS IN SECOND LANGUAGE ACQUISITION

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ABSTRACT

A basic component of Gardner and Lambert's (1972; Gardner, 1979) model of motivation in second language learning has been the role played by the integrative and instrumental orientations in directing and sustaining motivation. Research evidence concerning the model has been contradictory, however, and has led to debate about the role of affective variables in second language learning. The present study traced this conflict to two sets of problems: conceptual problems concerning the definition of orientations and their relationship to motivation, and contextual problems, concerning the composition of orientations and their importance in the language learning process as a function of socio-cultural factors in the learner's environment. The purpose of the study was two-fold: first, to verify the existence of the integrative and instrumental orientations in different learning contexts and to determine if other, as of yet undefined orientations exist; second, to assess the effect of the learning context on student endorsements of orientations and on the relationship between orientations and motivation.

Data were collected from 813 Grade 11 students partitioned into groups according to combinations of three dichotomized socio-cultural factors: the ethnolinguistic group to which the student belonged (anglophone vs. francophone), the socio-political status of the target language (official French or English vs. minority Spanish), and the cultural composition of the milieu (unicultural vs. multicultural). Students in the eight groups were asked to rate the importance of each of 37 reasons for learning a second language and to answer a series of questions used to assess their level of motivation.

Factor analyses were used to delineate and compare the compositions of orientations in the groups. Multiple regression and LISREL causal modeling analyses were used to examine the relationships between orientations and motivation, while multivariate analysis of variance was used to compare student endorsement of orientations across the contexts. The results show that four orientations, which did not include the integrative orientation, existed in all groups: general instrumental, travel, friendship, and knowledge orientations. It was also found that socio-cultural factors determined both the composition of some orientations and the importance of orientations in the learning process. Generally, orientations were more highly correlated with motivation in the anglophone groups than in the francophone groups. The friendship orientation was relatively more important in motivating francophones than were the other three general orientations. Anglophone students, on the other hand, tended to rate the knowledge orientation as more important than did francophones. Finally, students learning a minority

language endorsed the travel orientation, while learners of the official languages tended to endorse the instrumental orientation.

These results indicate that students are motivated by several relatively specific and concrete orientations simultaneously, and that the relative importance of these several orientations varies according to structural factors in the learning environment. The results are discussed in terms of their implications for changes in current models of second language acquisition and pedagogical practice.

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INTRODUCTION

It is widely recognized that language aptitude and motivation to learn a language are two major determinants of proficiency in a second language (see e.g., Carroll, 1962; Gardner and Lambert, 1972). Aptitude has traditionally included concepts purportedly measured by the Modern Language Aptitude Test (Carroll, 1962; Carroll and Sapon, 1959): phonetic coding ability, grammatical sensitivity, rote learning ability, and inductive language learning ability. Motivation, following traditional psychological theory, has included two aspects: the effort expended in learning the language and the goals of the learner.

Initially building upon the work of Jordan (1941) and Jones (1949, 1950), who studied the relationship between attitudes and learning, the most intensive study of motivation in second language learning has been provided by Gardner and his associates (see Gardner and Lambert, 1972; Gardner, Smythe, Clément and Gliksman, 1976). Very early in their work, these researchers identified two major components of motivation in second language learning: intensity and orientation to the learning task (Gardner and Lambert, 1959). The intensity component corresponds to the effort expended or perseverence component of motivation in traditional psychological theory. The orientations component has corresponded to the goals sought or the directionality of motivation in traditional theory (see Gardner and Lambert, 1972, p. 15, ff.; Gardner and Smythe, 1974).

Clément (1978) noted that these two components of motivation in second language learning are derived from two different schools of psychological thought. The effort component can be identified with the behavioristic conception of drive as explicated by Tolman (1925, 1967), Hull (1943), and Miller (1959). In Hullian theory, drives are observable aspects of behavior, corresponding to the vigor of an organism's response; Miller (1959) similary defined motivation as the speed with which an organism approaches a goal. In second language acquisition, the concept of drive was adopted by Carroll (1962) who defined motivation as the length of time an individual is willing to devote to language study. Along the same lines, Gardner used the notion of drive in defining motivation as the degree of effort the student is willing to exert in order to learn the language (see Gardner and Smythe, 1974; Gardner and Lambert, 1972; Gardner, Smythe, Kirby, and Bramwell, 1974).

The second component of motivation, the goal aspect, has received most attention from social psychological theorists describing the directed nature of behavior. This manner of conceiving motivation, known as the "expectancy-value" approach (see Atkinson, 1964), is derived from Lewin's (1938) notion that the tendency for an individual to perform a behavior is determined by the attractiveness, or valence, of that behavior. The

concept of valence has not, of course, been ignored by the behaviorists as shown, for example, by Tolman's use of the concept in his "purposive behaviorism" (e.g., 1955) or Hull's use of "incentive motivation" (Hull, 1973; see Feather, 1959). However, valence has received more attention in social psychological theories of motivation and decision making focussed on determining how an individual comes to choose between competing activities (e.g., Atkinson, 1964; Atkinson and Birch, 1978; Lewin, Dembo, Festinger, and Sears, 1944). The concept of orientation expresses this goal-directed nature of motivation, and Gardner and Lambert's work (e.g., 1972) has concentrated on determining which goals are important for the second language learner. Orientations, especially in the more recent work by Gardner (1979, 1981; Gardner, Gliksman, and Smythe, 1978) represent long range goals which, along with attitudes toward learning, support a student's motivation to learn a language over the years of requisite study.

Gardner and Lambert (1959, p. 267) originally defined two goals, labeled "instrumental" and "integrative" orientations, which have proven to be important in second language learning. The learner's orientation to the learning task is assessed by asking the learner his or her reason for study. An instrumental orientation is inferred "if the purposes of the language study reflect the more utilitarian value of linguistic achievement, such as getting ahead in one's occupation". An integrative orientation reflects the student's wish to "learn more about the other cultural community as if he desired to become a potential member of that group" (Lambert, 1963, p. 114). Although the possibility exists that other orientations may be important in second language learning (see Gardner, 1977), only these two have been extensively investigated. Conceptualized as long range goals, the integrative and instrumental orientations were posited as "precursors" to the student's motivation to learn in Gardner et al.'s, (1974) language learning model and, in a later model (Gardner, 1979), as sustaining motivation.

The concept of the integrative orientation was originally developed from Mowrer's (1950) and Ervin-Tripp's (1954/1973) theories concerning the role of identification processes in learning. Mowrer conceived of identification as a form of secondary reinforcement which occurs, as in many other contexts, in child rearing. Parental behaviors, including speech behaviors, come to be associated with the gratification of primary needs by the child and, as such, themselves become gratifying. As the child matures, he is able to behave similarly to his parents and these imitative behaviors, because of their links to primary gratification, are also gratifying to the child. Ervin-Tripp (1954/1973) suggested that an analogous process is at work in second language acquisition. In this case, the language learner identifies with members of the second language community and adopts behaviors characteristic of that community. Ervin-Tripp observed that the identification process would usually be less effective in the second language learning

situation. This occurs because affective ties developed in this context would tend to be weaker than those developed when the first language is learned in the context of the family.

Gardner and Lambert (1959) defined the integrative orientation similarly, arguing that "an individual acquiring a second language adopts certain behavior patterns which are characteristic of another cultural group" (p. 267). In this study, an "Orientation Index" was included in the test battery which served to classify the learner as an integrative or an instrumental learner. It was expected, in this early study, that second language achievement would tend to be higher for integratively oriented students. Ervin-Tripp (1954/1973) had suggested much the same thing when she introduced the topic of identification, saying that "we need to understand why language learners learn much more than intelligibility for instrumental purposes" (p. 1).

The results of Gardner and Lambert's (1959) study tended to support this idea. A factor analysis of the variables showed that the Orientation Index measure loaded significantly on the same factor as language achievement, motivation, and attitudes toward the second language community (the subjects were Montreal anglophones studying French). Gardner and Lambert identified this factor as representing a particular type of motivation, due to the loadings of the Orientation Index and attitude variables, characterized by "a willingness to be like valued members of the language community" (p. 271; italicized in the original). Consequently, because the criterion, language achievement, loaded on this same factor, Gardner and Lambert concluded that the other three variables must be important for second language acquisition. A second study (Gardner, 1960) showed similar results, with the integrative orientation and motivation (but not attitude) variables loading on the same factors as achievement variables.

These early works developed the concept of the integrative orientation as a necessary component of successful language learning: the successful student learns behaviors of the second language group in addition to language behaviors. As Gardner later stated, the student's "ultimate goal" must be psychological integration with the other community (Gardner et al., 1978, p. 182). This notion is the obverse of the older anthropological use of language learning as an index of acculturation (see Fishman, 1972; Haugen, 1956), and is widely held at present (see, e.g., Alptekin, 1983; Brown, 1980a, 1980b; Krashen, 1981; Meisel, Clahsen, and Pienemann, 1980; Oller 1981a). A number of authors (Bond and Yang, 1982; Brown, 1980a; Jacobovits and Gordon, 1974; and Schumann, 1976, 1978) have argued that language learning will be impeded if the individual cannot adopt the behaviors and values of the other community.

Although Gardner and Lambert's early studies (see Gardner, 1960, 1966) demonstrated the importance of an integrative, as

opposed to an instrumental orientation in second language learning, later studies, including one by Anisfeld and Lambert (1961), questioned both the composition of these orientations and their importance in language learning. Perhaps the most strident criticism has come from Oller and Perkins, who have published a series of articles critical of the role of "affective" variables, including the integrative and instrumental orientations, in language acquisition research (1978a, 1978b, 1978c; Oller, 1978, 1981a, 1981b, 1982). These authors cited conflicting research results to question the verisimilitude of depicting language learners as integratively or instrumentally motivated, and to question the validity of measures used to assess affective variables. Following Gardner's (1980) suggestion, these questions are here traced to two problems concerning orientations. The first of these is a conceptual problem. It concerns the basic definitions and operationalizations of orientations, and the relationships between orientations and motivation. The second problem, a "contextual" problem, concerns socio-cultural factors in the learning milieu which affect the composition and importance of orientations to second language acquisition. It is proposed here that examination of these two problems will help explain the conflicting hypotheses and research results concerning the relations between the integrative and instrumental orientations and second language competence that have arisen during the last decade.

Conceptual Problems

Gardner and Lambert's (1959) first definition of the integrative orientation does not appear to truly reflect the concept from which it was developed, Ervin-Tripp's (1954/1973) representation of an identification process in second language learning. Ervin-Tripp's notion of identification included two important elements: the development of strong affective ties with members of the second language group and the adoption of behavior patterns of that group. The operational definitions of the integrative orientation given by Gardner and Lambert -- "to learn more about the language group, or to meet more and *different* people" (1959, p. 207, italics in original) -- do not appear to represent Ervin-Tripp's concept.

This issue was addressed immediately by Gardner's next study (1960). With the use of open-ended questions, the student was allowed to give his or her own reasons for study. Learners were classified as integratively oriented if they expressed the desire to better know members of the second language group and become more friendly with them. The development of affective ties was thus included in the definition of the integrative orientation, while the identification process was ignored. Many studies completed in 1961 and later posed the identification question directly, asking subjects if a reason for learning the language was to enable them to think and behave like members of

the target language group (Gardner and Lambert, 1972, p. 148). At the same time, the integrative orientation was defined as an "open minded" interest in the other cultural community, "to the point of eventually being accepted as a member of that group" (p. 3). This was contrasted with the instrumental orientation, or the learning of a second language "in order to derive benefits of a non-interpersonal sort" (p. 14), such as social recognition or economic advantage.

Although the definitions of the integrative and instrumental orientations might seem self-explanatory, there have been many inconsistencies in their application to specific research problems. Gardner et al. (1974) reported that the instrumental orientation had been difficult to define, that it represented "a type of grab-bag of motivational pressures, ... any personal need which did not involve an interest in the communicative value of the language" (p. 7-11). Similar reasons for learning a language have been labeled both integrative and instrumental by different researchers. For example, Spolsky (1969) considered "having a chance to be away from home" an integrative reason for learning a language and Burstall, Jamieson, Cohen, and Hargreaves (1974) called "travel abroad" integrative. However, Lukmani (1972) and Cooper and Fishman (1977) considered "travel abroad" to be an instrumental orientation. As Gardner (1977) and Oller (1978) remarked, a particular reason for studying a second language might be interpreted as integrative or instrumental, depending upon the interests and understanding of the learner.

In addition to inconsistent definitions of the instrumental and integrative orientations, there has also been confusion regarding definitions of integrative motivation. Although Gardner and Lambert (1959, 1972) defined orientations and motivation as distinct concepts, the concept of motivation actually used by these researchers has been what Gardner (1966) labeled the "integrative motive", which contains a number of attitudinal and motivational components. These include attitudes towards the second language group and toward the learning task, motivational intensity, desire to learn the language, and the integrative orientation.

It has been the integrative motive, and not its constituent parts taken alone, that Gardner and his associates have demonstrated to be a significant predictor of second language proficiency (see Gardner, 1977, 1980). A number of researchers, attempting to build on Gardner's work, appear to have missed this distinction. Spolsky's (1969) scheme for assessing the integrative motive is an example of this misunderstanding. Spolsky calculated a measure of the integrative motive from "indirect" measures of the learner's attitudes toward his or her own group and toward the second language group. In Spolsky's scheme, a subject is asked to rate (a) himself, (b) his ideal self, (c) the first language group, and (d) the second language group on the same list of adjectives. The ratings from each list are then correlated with those from each of the other three

lists. Spolsky measured integrative motivation as the correlation between (b) and (c) minus the correlation between (b) and (d) -- purportedly a measure of the degree to which ratings of the two language groups approximated the subject's ideal. Spolsky found that this "indirect" measure correlated higher with second language proficiency measures than what he called Gardner and Lambert's "direct" measures of motivation.

Many researchers have used variants of Spolsky's indirect measure to assess language learning motivations, with conflicting results (Asakawa and Oller, 1977; Chihara and Oller, 1978; Lukmani, 1972; Pierson, Fu, and Lee, 1980; Oller, Baca, and Vigil, 1977; Oller, Hudson, and Liu, 1978; Oller, Perkins, and Murakami, 1980). Lukmani (1972), for example, found a positive correlation between "instrumental" adjectives (describing the second language group as successful, having a high standard of living, modern, and cultured) and second language proficiency. Oller et al. (1977) interpreted a negative correlation between a proficiency measure and a factor containing positive valuations of the second language group as indicative of an "anti-integrative" or "instrumental" orientation. Rather than measuring orientations or motivation, these indirect measures appear to be assessing learners' attitudes toward various cultural groups. As such, they may tap one important aspect of the integrative orientation, the positive affective regard toward the second language group. However, the second aspect of the integrative orientations, as defined in Ervin-Tripp's (1954/1973) discussion, is not included in these measures. The neglected aspect is the desire of the learner to identify with valued members of the target language community.

Incorrect and inconsistent definitions of the integrative and instrumental orientations, and the integrative motive, with subsequent inconsistent research results, have been partly responsible for Oller's (1978, 1981a, 1981b) questioning of the importance of the integrative orientation in second language learning. A related difficulty, again conceptual in nature, has been the tendency to consider the integrative and instrumental orientations as mutually exclusive. Initially, Gardner and Lambert (1959; Gardner,1960) used the Orientation Index to classify a student as either integratively or instrumentally oriented. The Anisfeld and Lambert (1961) study demonstrated the problem inherent in this dichotomy. Here, what were originally thought to be instrumental reasons for study (to be successful, to get a good job, to enter a profession) appeared instead to be integrative reasons for the sample of Jews studying Hebrew used in this study. The authors realized that to get a job or to enter a profession requiring Hebrew meant that the student would be choosing a Jewish profession (e.g., becoming a rabbi or a Hebrew teacher), involving intensive participation and integration into Jewish tradition and culture.

Although separate scales were used to assess the integrative and instrumental orientations in some of the studies

reported in Gardner and Lambert's *Attitudes and Motivation in Second Language Learning* (1972), the theoretical relation between the two orientations was not made absolutely clear. The two orientations were contrasted with each other, and depicted as occupying opposite ends of a continuum (pp. 14-15). However, the results of the Maine French American study reported in *Attitudes and Motivation*, as well as many later researches (Clément,Gardner, and Smythe, 1977; Clément, Major, Gardner, and Smythe, 1977; Gardner, Smythe, and Clément, 1979; Gardner et al., 1974; Johnson and Krug, 1980; Lukmani, 1972; Muchnick and Wolfe, 1982; Oller et al., 1978; Randhawa and Korpan, 1973), revealed that measures of the two orientations can be positively correlated with each other and load significantly on the same factor in a factor solution with other variables. This indicates that both orientations can be concurrently important (or unimportant) for the learner in some learning situations.

Many other researchers have similarly sought to dichotomize integrative and instrumental orientations (e.g., Cooper and Fishman, 1977; Johnson and Krug, 1980; Lukmani, 1972; Spolsky, 1969). Muchnick and Wolfe (1982), after presenting results showing that the integrative and instrumental orientations seemed to function together as motivators, mistakenly stated that this had not been found in Canada. Johnson and Krug (1980) found an unexpected positive relation between the integrative and instrumental orientations, and factor analyzed the questions in their study that assessed these orientations (most of the questions were taken from Gardner and Lambert, 1972). Ratings of items classified as being integrative and instrumental reasons loaded significantly on the same factors. The authors concluded, from these and other results, that a conceptual revision of motivation in second language learning was required.

The results of these studies--especially the Johnson and Krug (1980) study--do indeed suggest that second language learning motivation might be different from what has been thought. Following Gardner and Lambert's (e.g., 1972) lead, reasons given by students for learning a language have been classified a priori by researchers as integrative or instrumental orientations. The research results suggest, however, that "pure" integrative and instrumental orientations might not exist, and that students might learn a language for other reasons. In the Johnson and Krug research, for example, making friends and understanding members of the target group (a priori classified as "integrative" reasons), and getting a job and fulfilling educational goals ("instrumental") were all found to be inter-related reasons for study (pp. 245-246). This cluster of reasons suggests that one orientation for these students was a hybridization of instrumental and friendship-seeking reasons, rather than an integrative or an instrumental orientation. Rather than continuing to presume the existence of the integrative and instrumental orientations, and to attribute one or the other of them to all language learners, these results suggest that some study should be given to what orientations actually do

exist and to how they are related to motivation. Such study would define an orientation empirically as a set of inter-related reasons given by a group of students for learning a second language. The integrative orientation itself would be operationally defined as the clustering together of reasons which are related to the definition of this concept: the willingness to identify with members of an affectively valued language community. The instrumental orientation would take on a relatively restricted definition: the learning of a second language in order to further personal career or school goals.

The present study thus conceptualized orientations, using factor analytic methods to define the constructs (orientations) underlying inter-related reasons given for language study. In addition to seeking to determine what "new" (previously undefined) orientations might be important for the language learner, the present study sought to verify the existence of the integrative and instrumental orientations.

Defining orientations empirically admits the possibility that different orientations might be obtained from different groups of second language learners. In that socio-cultural characteristics of the learner's milieu determine how the student will be able to use a second language (see Gardner, 1977), so should the same characteristics be expected to determine the student's perceptions of these uses--the orientations. In addition to determining what orientations actually exist for different groups of learners, socio-cultural factors in the milieu may also determine the importance of the orientations in the learning process. It is thus probable that overlooked contextual factors have been as important as the conceptual ambiguities in producing inconsistent research results in the various studies of the relations between attitudes, orientations, motivation, and second language learning.

Contextual Problems

With some exceptions, early studies of motivation and second language learning, from Gardner and Lambert's first (1959) study through the early 1970's, were studies of North American anglophones learning French. Although acknowledging the presence of an instrumental orientation, these studies emphasized the importance of the integrative orientation and the integrative motive in learning a second language (see Gardner, 1980; Gardner and Lambert, 1972; Gardner et al., 1976; Gardner et al. 1974). Beginning in the late 1960's with Gardner and Santo's (1970) Phillipines study, and Spolsky's (1969) studies of foreign university students learning English in the United States, motivation and language learning in other contexts received greater attention. As with the two mentioned studies, the majority of this research concerned the learning of English or, in the United States, the learning of Spanish (Cohen, 1975;

Muchnick, and Wolfe, 1982; Teitelbaum, Edwards, and Hudson, 1975). Backman (1976), Johnson and Krug (1980), and Oller and his colleagues (Murakami, 1980; Monshi-Tousi, Hosseine-Fatemi, and Oller, 1980; Oller et al., 1978; Oller et al., 1980) studied foreign students learning English at universities in the United States while Oller et al.'s (1977) study concerned immigrants learning English in the United States and Hoadley (1977) studied immigrant students in England. Other studies dealt with the learning of English by groups in their native culture (Asakawa and Oller, 1977; Chihara and Oller, 1978; Cooper and Fishman, 1977; Lukmani, 1972; Pierson et al., 1980). Finally, in Canada, Gagnon's (1973) and Clément and his associates' (Clément, 1978; Clément, Gardner and Smythe, 1977; Clément, Major, Gardner, and Smythe, 1977) research considered motivational variables and language learning for francophones studying English in Canada.

Results from these studies are contradictory, ranging from the report that both measures of the integrative and instrumental orientations correlated with a second language proficiency measure (Lukmani, 1972), to the report that no relationships exist at all between orientations or motivation and proficiency (e.g., Asakawa and Oller, 1977; Cooper and Fishman, 1977; Pierson et al., 1980), to reports of negative correlations between integrative (Oller et al., 1980) or instrumental (Teitelbaum et al., 1975) orientations and proficiency measures. Some of these results were cited by Oller and Perkins (1978a, 1978b, 1978c; Oller, 1981a), to demonstrate that there is little or no relationship between second language proficiency and "affective" variables, including orientations, attitudes, and motivation.

In addition to the conceptual problems discussed earlier, which render comparisons between the studies difficult, it was suggested by Gardner (1980) that contextual differences between the language learning studies cited by Oller and Perkins (e.g., 1978a; Oller, 1981a) may help explain the inconsistent research results. Making more explicit Gardner's (1980) suggestion, the present study sought to assess, first, if contextual or "cultural" factors determine what reasons are given by students for learning a second language and, second, if these factors determine the importance of the role played by orientations in the language learning process. Although very little work has been done comparing orientations between different learning contexts, the literature on this and related subjects implicates at least three contextual factors as potentially important determinants of orientations. These factors are the learner's ethnolinguistic group membership, the cultural composition of the milieu, and the status of the target language.

First, ethnolinguistic group membership might influence the reasons for sustaining the learner's interest in learning a second language. In addition to a common speech style, belonging to an ethnolinguistic group implies sharing with members of that group common customs and values, and a common life style. Within

a larger community, ethnic group membership also partly determines an individual's attitudes and behavior toward members of other groups (see Giles, Bourhis, and Taylor, 1977; Lambert and Klineberg, 1967; Tajfel, 1974). In considering this factor, authors have focussed mainly on the dominance relationships between the first and second ethnolinguistic groups. Addressing the issue at a theoretical level, Giles and his co-workers have examined the problem of determining the relative dominance of two ethnolinguistic groups in contact (Giles et al., 1977) and of determining how this factor might affect an individual's integration into the second group, including learning the language of that group (Giles and Byrne, 1982). Schumann (1976, 1978, p. 77 ff) included the relative status of two groups as one factor differentiating a "good" from a "bad" language learning context. Finally, again at a theoretical level, Clément and his associates (Clément, 1980; Clément, Gardner, and Smythe, 1980; Clément and Hamers, 1979) considered the relative status of two ethnolinguistic groups to be the major determinant of an individual's motivation to approach or to avoid learning a second language.

A number of other writers have discussed the political influences of ethnolinguistic group dominance on language learning orientations. These authors have depreciated the emphasis placed on the role of the integrative orientation in situations where a dominant world language, English (see Conrad and Fishman, 1977), is being learned by a member of a subordinate group. In 1976, Kachru, discussing the learning of English by natives of third world countries, argued that English can be learned for instrumental reasons alone. Alptekin (1981) added that the assumption that such learners are integratively motivated, and the utilization of techniques capitalizing on this supposed motivation, might actually cause unnecessary difficulties for the instrumental learner, including increased culture shock and feelings of anomie. Macnamara (1973) and Taylor and Simard (1975) suggested that the integrative orientation should be less important for an oppressed people learning the language of their oppressors. Saville-Troika (1975) argued that the teaching of English to minority group children in the United States should not be done in such a way as to replace the child's own culture by the dominant English culture (see also Alptekin, 1982). Finally, research by Cohen (1975) demonstrated that parents of Mexican American children learning Spanish thought it most important that their children learn Spanish in order to preserve their cultural tradition and learn English in order to get a job.

These discussions would suggest that the relative dominance of the first and second ethnolinguistic groups might determine, in part, the learner's orientation to learning a language. The suggestion made by authors like Alptekin (1981) and Macnamara (1973) is that members of a subordinate ethnolinguistic group would learn a dominant second language for instrumental reasons. In Canada, this would mean that the

relatively dominant Canadian (and North American) language, English, would, be learned for instrumental reasons by members of the relatively subordinate francophone group.

The relative dominance between groups is incorporated in a model proposed by Giles et al. (1977), who suggest that the relation between ethnolinguistic group membership and orientations might vary as a function of the salience of that membership. According to these three authors, the salience of group membership for the individual is determined in part by the second contextual factor discussed here, the cultural composition of the milieu. Building on Barth's (1969) work on the meaning of ethnic boundaries, these authors held that speech is a salient marker of ethnolinguistic identity only insofar as it can be contrasted to the speech style of another group. In the present study, this suggests that, in multicultural settings, where the language learner has greater access to other cultures and languages (both directly and indirectly through the media) language would become a more salient marker of group membership. It would thus be expected that differences in orientations observed between groups in a unicultural setting would be more pronounced in a multicultural setting.

Like the cultural composition of the milieu, the sociopolitical status of the target language, the third contextual factor studied here, would also be expected to determine the type of acquaintance the learner has with a target language. This factor was introduced by Marckwardt (1965), who distinguished between two types of language learning experiences, learning a "foreign" and learning a "second" language. Learning a "foreign" language refers to the traditional North American context of learning a language that does not necessarily have immediate relevance to the student's every-day life. On the other hand, learning a "second" language means learning a language regularly used for communication in school instruction or in the student's larger community.

Other writers have distinguished between second and foreign language learning, but have given slightly different meanings to the contrast. Oller and his colleagues (Chihara and Oller, 1978; Oller et al., 1977) emphasized the degree to which the learner is able to use the target language. A target language which is widely spoken in the learner's milieu is called a "second" language, otherwise it is a "foreign" language. Alptekin (1981) called second language learning that which occurs when immigrants learn the language of the dominant majority culture, while foreign language learning occurs when transient foreign students learn a language in the target culture. In discussing this differentiation, Alptekin noted that, whereas the immigrant must adapt to the dominant culture (integrate), the student need not make these adaptations and might study for instrumental reasons.

Gardner and Lambert (1972, pp. 141-142) also made use of the second versus foreign language learning distinction in interpreting the results of some of their research. As with Marckwardt (1965), Gardner and Lambert refer to foreign language learning as being typical of the North American classroom experience--studying a language that is not often used by the student outside the language classroom. Learning a second language refers, as with Marckwardt, to learning a language that is used daily by the student and, Gardner and Lambert add, to learning a language that is prestigious relative to the student's native language. Gardner and Lambert concluded from their studies of North American learners of French and Filipino learners of English that the integrative orientation is important in the foreign learning context while, in the second language learning context, the instrumental orientation also appeared to be important.

Two factors appear to be important in the distinction between foreign and second language learning for these various authors: a) The degree to which the learner will use the language in every-day life, and b) the prestige accorded the language being learned. Foreign language learning describes those contexts where the learner will not regularly use the new language, and the language being learned is less prestigious than that of the learner. Second language learning would then refer to the opposite situation where a relatively prestigious language is being learned in order to be used in every-day life. In the present study, conducted in the Canadian setting, these factors were incorporated into the definition of target language status, which was defined in terms of the socio-political status of the target language to be either an official or a minority target language. The learning of one of Canada's official national languages, English or French, was contrasted to the learning of a less important minority language in Canada, Spanish. The learning of one of the official Canadian languages more approximates second language learning, given the statutory prestige accorded these languages and the degree to which the languages can be used by the learner. On the other hand, Spanish is a comparatively less prestigious and less used language in Canada, and learning Spanish more closely resembles learning a foreign language. While different orientations might be expected for anglophones and francophones learning French or English (given that they are different ethnolinguistic groups), both groups might be expected to evidence comparable orientations to learning Spanish. Gardner and Lambert's (1972) evidence would suggest that the integrative orientation is more important in the learning of the minority language, Spanish, than in the learning of one of the official Canadian languages.

There have been, then, a number of suggestions in the literature concerning the influence of the three contextual factors--ethnolinguistic group, cultural composition of the milieu, and target language status--on the importance of the integrative and instrumental orientations for language learning

in Canada. First, the large amount of work done by Gardner and his associates (e.g., Gardner and Lambert, 1972; Gardner et al., 1976) would suggest that the integratively oriented student is the most highly motivated learner among Canadian anglophones learning French. The integrative orientation should also be more important for Canadian students, francophone as well as anglophone, learning a minority language such as Spanish. The instrumental orientation would be expected to be most important for the relatively subordinant francophone group learning English, especially in a multicultural as opposed to a unicultural milieu.

Purpose and overview of the present study

While previous work yields a number of suggestions regarding the relationships between contextual factors and the integrative and instrumental orientations, only Gardner and Lambert's (1972) series of studies attempted systematic cross-contextual comparisons of these two orientations, and nothing has been said concerning relationships between contextual factors and other orientations. Given the problems defining the concepts of the integrative and instrumental orientations described earlier, the suggestions concerning these orientations must be regarded with caution. One purpose of the present study, closely linked to the attempt to resolve the conceptual problems, was to determine the effect of the learning context on the composition of orientations and on their importance in the learning process. To this end, orientations and motivation were studied in eight different learning contexts, representing all combinations of the three contextual factors thought to be important in second language learning--the ethnolinguistic group of the learner (anglophone or francophone), the cultural composition of the milieu (unicultural or multicultural), and status of the target language (official or minority language).

The compositions, and thus the definitions, of orientations in each learning context were determined empirically. Students in each setting rated their endorsement of the importance of a number of different reasons for learning a second language; these ratings were factor analyzed to determine which reasons clustered together to form an orientation. Factor comparison techniques were then used to compare the orientations between the settings in order to determine which orientations were unique to particular settings and which were common to more than one setting.

After delineating the orientations and comparing them across the eight settings, two measures of the importance of orientations for language learning were assessed and compared across the settings. First, the relationship between orientations and motivation was assessed. Gardner et al.'s (1974; see also Edwards, 1980) model posits the integrative and instru-

mental orientations as precursors of motivation, serving, Gardner (1979) added, as long range goals to sustain motivation. In the present study, this proposed relationship between orientations and motivation was tested for the empirically derived orientations. Regression techniques were utilized to quantify and test a model predicting motivation from orientations within each of the eight contexts. This model was compared across the eight contexts to determine if one or more of the contextual factors caused variation in the relationships between orientations and motivation. A second test of the importance of orientations compared student's endorsements of the importance of a particular orientation between the different learning contexts. Analysis of variance was used to test the effects of the three contextual factors on the level of endorsement given the orientations by the students.

METHOD

Subjects

Data were gathered from 813 Grade 11 students studying a second language in Eastern Canada. These students belonged to one of eight groups, partitioned according to combinations of the three factors studied: Ethnolinguistic Group (anglophone or francophone), Milieu (unicultural or multicultural), and Target Language (official or minority). London, Ontario and Québec City were chosen as relatively unicultural milieux (anglophone and francophone, respectively), while Ottawa was chosen as the multicultural milieu. Table 1 summarizes the information about each group and indicates the number of students in each group. All students were actually involved in the study of a second language at the time of testing. Secondary level students were chosen in order to have samples comparable to those used by Gardner (e.g., Gardner and Lambert, 1972; Gardner et al., 1976).

Materials

A questionnaire was used which contained 37 items suggesting reasons for studying a second language followed by 20 items used to assess motivational intensity and desire to learn a second language. One of four versions of the questionnaire was used according to the language of the respondent (English or French) and the language of study (official languages French or English, or Spanish). The four versions of the questionnaire and the corresponding instructions are presented in Appendix A. All orientation items on the questionnaire were written in English and translated into French. The items in French were then back-translated into English by a bilingual individual who was not acquainted with the original English version. This procedure demonstrated that, apart from necessary adaptations such as

changing "French" to "English" (or "Spanish"), or "Québec" to "United States" (or "Mexico"), the translations were accurate.

Table 1

Descriptions of the Eight Groups Used in the Study

Group Number	Ethnolinguistic Group	Target Language[a]	Milieu[b]	n
1	Anglophone	Official	Unicultural	151
2	Anglophone	Official	Multicultural	98
3	Anglophone	Minority	Unicultural	97
4	Anglophone	Minority	Multicultural	75
5	Francophone	Official	Unicultural	110
6	Francophone	Official	Multicultural	136
7	Francophone	Minority	Unicultural	65
8	Francophone	Minority	Multicultural	81
Total				813

[a]Official languages: French for anglophones, English for Francophones. [b]Unicultural milieux: London, Ontario for anglophones, Québec City, Québec for francophones. The multicultural milieu was Ottawa, Ontario in all cases.

The orientation items were selected from those used in previous work done in this area by Burstall et al. (1974); Carroll (1975); Chihara and Oller (1978); Gardner et al. (1974); and Spolsky (1969). The items, chosen to include a wide selection of reasons for studying a second language, are shown in Table 2 (the version used for anglophones studying French). Each reason was preceded by the phrase "Studying (English / French / Spanish) can be important for me because...." The student rated each reason on a Likert-type six point scale anchored at one end by *strongly disagree* and at the other by *strongly agree*.

The ten motivation items, listed in Table 3, together form the Motivational Intensity scale described by Gardner, Clément, Smythe, and Smythe (1979) for anglophone students and Clément, Smythe, and Gardner (1976) for francophones. These multiple

Table 2

Reasons for Learning a Second Language

1.	It will allow me to be more at ease with fellow Canadians who speak French.
2.	It will help me find out how people live in French-speaking areas.
3.	I may need it to be admitted to a higher school.
4.	I think it will someday be useful in getting a good job.
5.	I would like to go to Quebec.
6.	I'll need it for my future career.
7.	I want to become a member of the French Canadian community.
8.	It will help me if I need to study another language later on.
9.	It will help me understand French Canadians and their way of life.
10.	I would like to go to France.
11.	It will make me a more knowledgeable person.
12.	I would like to meet some French people.
13.	It will help me appreciate the problems that French people have in a predominantly English-speaking milieu.
14.	I'll need it someday to get a degree.
15.	It will help me understand my own language better.
16.	I would like to make friends with some French people.
17.	It will make me appear more cultured.
18.	It will help me to be successful in business.
19.	It will be useful to me after I leave school.
20.	I feel that no one is really educated unless he is fluent in the French language.
21.	It will help me if I should ever travel.
22.	I would like to get a job where I could use my French.
23.	It will enable me to gain good friends more easily among French-speaking Canadians.
24.	Other people will respect me more if I have a knowledge of another language.
25.	It will help me to get to know French speaking people.
26.	It will permit me to become an influential member of my community.
27.	I will be able to participate more freely in the activities of other cultural groups.
28.	It will help me acquire new ideas and broaden my outlook.
29.	I need it in order to finish high school.
30.	It will help me to get a better paying job.
31.	It will help me to learn about myself.
32.	It will allow me to gain influence over French Canadians.
33.	It will allow me to meet and converse with more and varied people.
34.	It will help me if I ever enter politics.
35.	It will enable me to think and behave like French Canadians.
36.	I would like to travel to a French-speaking area.
37.	It will allow me to understand and appreciate French Canadian art and literature.

Note. Each reason was preceded by the phrase "Studying French can be important for me because...."

Table 3

Items on the Motivational Intensity Scale

1. I actively think about what I have learned in my French Class:
   a. (2) once in a while.
   b. (1) hardly ever.
   c. (3) very frequently.
2. If French were not taught in school, I would:
   a. (3) try to obtain lessons in French somewhere else.
   b. (1) not bother learning French at all.
   c. (2) pick up French in everyday situations (i.e., read French books and newspapers, try to speak it whenever possible, etc...).
3. When I am in French class, I:
   a. (1) never say anything.
   b. (2) answer only the easier questions.
   c. (3) volunteer answers as much as possible.
4. If there were a local French T.V. station, I would:
   a. (2) turn it on occasionally.
   b. (1) never watch it.
   c. (3) try to watch it often.
5. When I hear a French song on the radio, I:
   a. (1) change the station.
   b. (2) listen to the music, paying attention only to the easy words.
   c. (3) listen carefully and try to understand all the words.
6. When I have a problem understanding something we are learning in French class, I:
   a. (1) just forget about it.
   b. (3) immediately ask the teacher for help.
   c. (2) only seek help just before the exam.
7. When it comes to French homework, I:
   a. (1) just skim over it.
   b. (2) put some effort into it, but not as much as I could.
   c. (3) work very carefully, making sure I understand everything.
8. Considering how I study French, I can honestly say that I:
   a. (3) really try to learn French.
   b. (1) will pass on the basis of sheer luck or intelligence because I do very little work.
   c. (2) do just enough work to get along.
9. After I get my French assignments back, I:
   a. (1) just throw them in my desk and forget them.
   b. (2) look them over, but don't bother correcting mistakes.
   c. (3) always rewrite them, correcting my mistakes.
10. If my teacher wanted someone to do an extra French assignment, I would:
   a. (3) definitely volunteer.
   b. (2) only do it if the teacher asked me directly.
   c. (1) definitely not volunteer.

Note. Numbers in parentheses are weights given responses. They were not included on the questionnaire when it was given to students.

choice items were designed to assess the effort expended by the student in studying the language inside and outside of the classroom. Responses to the items are weighted from one (low motivation) to three (high motivation). These weights are shown in Table 3. A student's Motivational Intensity score was equal to the sum of the weights of responses on the 10 items. The scale has been shown to have a high degree of internal consistency for both anglophone and francophone samples, with a median Cronbach α (alpha) of .82 for anglophones (Gardner et al., 1979) and .77 for francophones (Clément et al., 1976).

The ten multiple choice items forming the Desire to Learn scale, shown in Table 4, were also taken from Gardner, Clément, and associates' Motivation and Attitudes Test Batteries (Gardner, et al., 1979; Clément et al., 1976). These items assess the degree to which the student wants to learn a language without reference to the amount of effort the student is exerting. Item responses are weighted as with the Motivational Intensity scale; the weights are shown in Table 4. The authors reported a median Cronbach α of .86 for this scale for groups of Canadian anglophones learning French (Gardner et al., 1979) and .80 for francophones learning English (Clément et al., 1976).

The measures of internal consistency (Cronbach α) found for the Motivational Intensity and Desire to Learn scales in each of the eight settings of the present study are presented in Table B-1 of Appendix B. This table shows that the α s are comparable to those found for the scales by Gardner and Clément and their colleagues. For the Motivational Intensity scale, the α s ranged from .66 to .83 with a median of .78. The Cronbach α s for the Desire to Learn scale ranged from .70 to .89 with a median α of .82.

Procedure

The questionnaire was presented to the students during their regular class time by experimenters who were unacquainted with the students and whose native language was the same as theirs. The instructions read by the experimenter appeared on the cover page of the questionnaire (see Appendix A). These informed the students of the confidentiality of their answers and of their right to withdraw from the study should they have found any question objectionable. The students were thereafter left to complete the questionnaire at their own pace.

Analyses

Analyses proceeded in stages with the particulars of one analysis dependent upon the results of a previous analysis. Overall, five sets of analyses were completed:

Table 4

Items on the Desire to Learn Second Language Scale

1. If I had the opportunity to speak French outside of school, I would:
   a. (3) speak French most of the time, using English only if really necessary.
   b. (2) speak it occasionally, using English whenever possible.
   c. (1) never speak it.
2. During French Class, I would like:
   a. (3) to have as much English as possible spoken.
   b. (2) to have a combination of French and English spoken.
   c. (1) to have only French spoken.
3. If there were a French Club in my school, I would:
   a. (3) be most interested in joining.
   b. (2) attend meetings once in a while.
   c. (1) definitely not join.
4. If I had the opportunity and knew enough French, I would read French magazines and newspapers:
   a. (2) not very often.
   b. (3) as often as I could.
   c. (1) never.
5. Compared to my other courses, I like French:
   a. (2) the same as all the others.
   b. (3) the most.
   c. (1) least of all.
6. If it were up to me whether or not to take French, I:
   a. (1) would drop it.
   b. (2) don't know whether I would take it or not.
   c. (3) would definitely take it.
7. If there were French-speaking families in my neighborhood, I would:
   a. (2) speak French with them sometimes.
   b. (3) speak French with them as much as possible.
   c. (1) never speak French with them.
8. If I had the opportunity to see a French play, I would:
   a. (3) definitely go.
   b. (2) go only if I had nothing else to do.
   c. (1) not go.
9. If the opportunity arose and I knew enough French, I would watch French T.V. programmes:
   a. (1) never.
   b. (2) sometimes.
   c. (3) as often as possible.
10. I find studying French:
   a. (2) no more interesting than most subjects.
   b. (1) not interesting at all.
   c. (3) very interesting.

Note. Numbers in parentheses are weights given responses. They were not included on the questionnaire when it was given to students.

1. Composition and intergroup comparison of orientations: factor analyses of the 37 reasons for learning a second language were completed on the eight groups separately to describe the composition of orientations. The factors derived from these analyses were then compared across the groups using a factor comparison technique.

2. Individual group predictions of motivations: separate multiple regressions of motivation on measures of orientations derived from the individual groups factor analyses were completed for each group in order to determine which orientation or linear combination of orientations was most related to motivation.

3. Item analyses: the intergroup comparison of factors described four orientations which were common to all groups. Item analyses were used to construct measures of these orientations which were comparable across groups and internally consistent within each of the groups. These measures were used in the two remaining analyses.

4. Generalized model of the prediction of motivation: structural equation modeling was used to predict motivation from orientations and to compare these relationships across the eight groups.

5. Student endorsement of orientations: multivariate analysis of variance was used to compare student ratings of the importance of orientations across the eight learning contexts.

Composition and Intergroup Comparison of Orientations

To delineate the orientations within groups, students' ratings of the 37 orientation items were factor analyzed separately for each group. Eight factor analyses were completed, each employing maximum likelihood extraction and varimax rotation (Dixon, 1981). Each of the factor structures was interpreted by two persons, who followed the procedure of defining a factor according to the items loading significantly (absolute value greater than .40) on that factor. Differences in interpretation were minimal and were reconciled in a subsequent discussion.

In order to compare the orientations defined by the eight factor analyses across groups, a procedure modeled after Jackson's (1969) multitrait-multimethod matrix analysis procedure was used. The multitrait-multimethod matrix is a matrix of correlation coefficients between measures of personality traits assessed using a variety of methods. It was first used by Campbell and Fiske (1959) to determine convergent and discriminant validities of the trait measures. According to Campbell and Fiske's method, correlations between similar traits measured

using different methods should be higher than those for dissimilar traits, which should be uncorrelated. Jackson (1969) proposed factor analyzing this correlation matrix, using an orthogonal factor rotation procedure, to better evaluate the validity of the traits: similar traits measured by different methods would, if the measures converged, load on the same factor while divergent measures (of dissimilar traits) should load on different factors. Jackson argued that, because intra-method relationships are not of interest, correlation coefficients between different traits measured by the same method are arbitrarily set to zero before factor analyzing the matrix.

In the present research, orientations were analogous to traits and group membership was analogous to methods in Jackson's procedure. A "multiorientation-multigroup" matrix was created by correlating the factor loadings of the 37 items for all pairs of orientations (factors) obtained for the eight groups. The data matrix used to compute this correlation matrix thus had, as rows, the 37 items; the orientations in each of the groups formed the 48 columns. As described by Rummel (1970), the correlation coefficient calculated between the loadings for a pair of factors, obtained from factor analyses of the same items, expresses the degree to which the patterns of factor loadings on the two factors are similar. Consistent with Jackson's (1969) approach, the correlations between orientations derived from the same group were set to zero (indicating their independence), and the resulting matrix was factor analyzed using the principal components procedure and varimax rotation (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975). Using this method, clusters of orientations common to all groups could be defined as well as those resulting from interplay of the three factors studied.

Individual Group Predictions of Motivation

Factor score measures of orientations derived from the individual group factor analyses were used to examine the relationships between motivation and orientations in each of the eight groups using multiple regression. Within each group, a measure of motivation was regressed on six orientation measures (factor scores from the individual group factor analyses) using a "forward stepping" procedure. In this procedure, the variable explaining the greatest amount of variance of the dependent variable, in conjunction with other variables already included in the equation, is entered at a given step. From these analyses, it was possible to determine what combination of orientations best predicted a student's motivation to learn a second language in each group. The results of these analyses indicated that four orientations shown by the intergroup factor analysis to be common to all groups were the most important predictors of motivation in each of the groups, justifying using only these *general* orientations in the remaining analyses.

Item Analyses

The four general orientations were used in analyses that examined the importance of orientations as a function of the three contextual factors. First, however, measures of each of the general orientations were developed that could be compared across learning contexts. For each general factor, items defining the orientation in each of the contexts were used as measures of the orientation. This was accomplished, for each subject, by summing together the subject's responses to these items, prorating for unanswered items. Item analyses, using Cronbach's α, were then used to refine these measures for each group separately by eliminating those items that proved to have low correlations with the total score for the scale. This technique provided measures of the general orientations that were internally consistent for each group and were comparable across groups.

Generalized Model of the Prediction of Motivation

The next set of analyses generalized the results found in the earlier regression analyses by formally comparing the relationships between orientations and motivation across the learning contexts. Using the measures of the four general orientations developed in the item analyses, structural equation modeling (see Bentler, 1980; Duncan, 1975) was used to test a model which specified motivation to be a function of the orientations and to compare this model across the eight groups.

A statistical analysis package, LISREL V (Jöreskog and Sörbom,1981) was used to complete these analyses. LISREL V (an acronym for linear structural relationships) is a general computer program used for the analysis of variance-covariance matrices (see Bentler, 1980; Bentler and Weeks, 1980; Pedhazur, 1982). Relationships between variables in the matrix are specified in the form of a causal model, or a series of regression equations, depicting the hypothesized effects of each variable on each of the other variables. As in path analysis, path coefficients are estimated between pairs of variables specified to be inter-related in the model. Also as in path analysis, a path coefficient indicates the degree of covariance between the two variables when all other relations with those variables (directly or indirectly) are held constant ("partialled out"). The system of simultaneous regression equations representing the model are solved according to an algorithm which seeks to minimize the differences between the observed variance-covariance matrix and that predicted from the model using a maximum likelihood criterion.

Relationships investigated using LISREL are between latent variables which are in turn defined as linear combinations of observed variables (analogous to factor analysis). This latter

type of analysis, dealing with the measurement of latent variables, is called a "measurement model". Causal or correlational relationships defined between the latent variables is called the "structural model" (Jöreskog and Sörbom, 1981, pp. 1-5 to 1-8).

Figure 1 portrays the model tested in the present study. The circles in Figure 1 represent latent variables, and the rectangles, observed variables. The arrows connecting each of the four orientations to Motivation indicate that Motivation is posited to be a function of the orientations. Correlations (covariances) between the orientations are indicated by the double-headed arrows. Motivation is a latent variable defined as a linear combination of the Motivational Intensity and Desire to Learn scales (the sums of the items composing each of these scales). Each of the four orientations is measured by only one observed variable, the sum of the items composing that orientation scale, and the latent variable for each orientation is thus equal to the observed variable. For this reason, no observed variables are shown attached to the orientations in Figure 1.

LISREL V was used to estimate the parameters of the model, that is, the regression coefficients representing each of the paths shown in Figure 1, and to assess the goodness of fit of the model to the data. Two statistics can be used to evaluate the estimated model (Jöreskog and Sörbom, 1981). First, a χ^2 (chi-square) statistic is calculated testing the goodness of fit of the predicted variance-covariance matrix to the observed data matrix. Second, standard errors and critical ratios (t-values) are calculated for each of the estimated parameters.

Except that Motivation was defined as a latent variable and that correlations between orientations were included in the model shown in Figure 1, this model is similar to the model implicitly tested using the multiple regressions described earlier. However, using LISREL, it was possible to test if the relationships between orientations and motivation were the same in all eight groups, or in subsets of the groups partitioned according to the three factors of the present study. Independent groups can be analyzed simultaneously with LISREL, and parameters of interest can be constrained to be equal across the groups. This allows the generation of a common set of parameters for numerous groups, effectively generalizing one solution to numerous populations. Jöreskog (1971; McGaw and Jöreskog, 1971), Sörbom (1974), and, more recently, Munck (1979) have described a comparison procedure whereby the goodness of fit of the common set of parameters for the several populations can be assessed. In this procedure, the χ^2 computed in the case when parameter estimates in the models are constrained to be equal across the groups is compared to that obtained when no constraints are specified. The latter case yields different parameter estimates for each group. Because the χ^2 statistic is additive, the difference in χ^2 between the two solutions

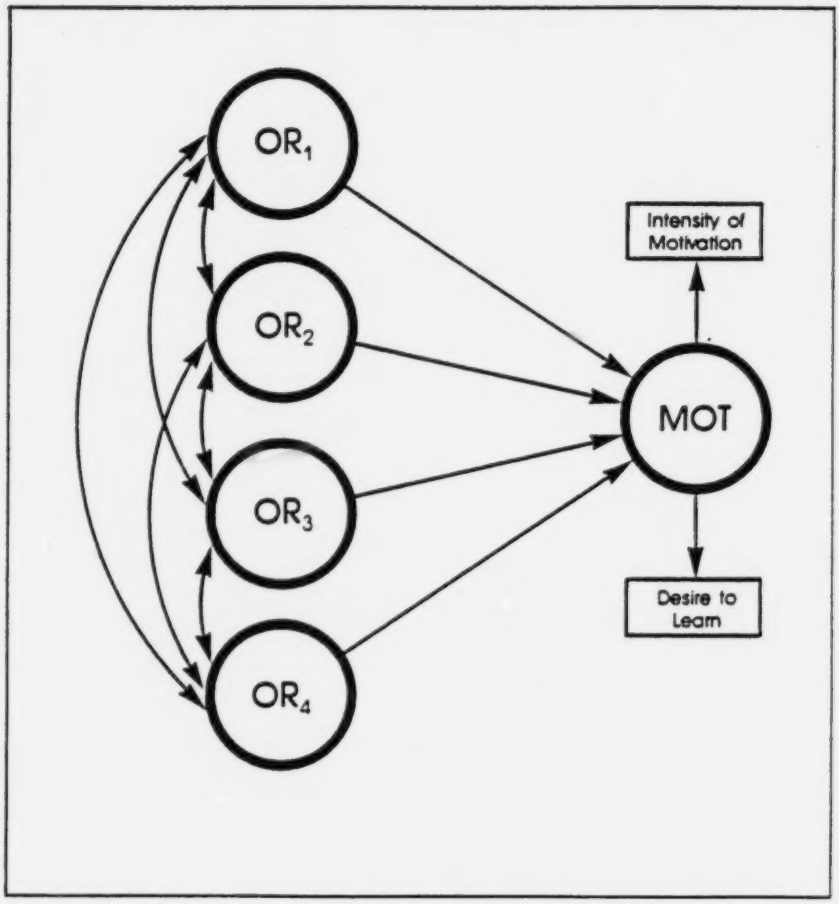

Figure 1. Model predicting Motivation (MOT) from Orientations (OR_i).

(constrained versus unconstrained models) can be treated as a χ^2 statistic with degrees of freedom equal to the difference in degrees of freedom (see, e.g., Jöreskog and Sörbom, 1981). If the difference χ^2 is not significant, it can be concluded that no significant information is lost when the parameter estimates are constrained to be equal across groups relative to when they are left free in each group. Thus, one could conclude that one solution adequately represents the data for all groups, a more parsimonious (and general) description than would be a different model for each group. The goodness of fit of the solution with eight separate equations was compared first to the solution specifying one equation for all groups (the most restrictive, or parsimonious solution) and then to solutions for combinations of groups determined by the three factors Ethnolinguistic Group, Milieu, and Target Language. Parameter estimates were constrained equal across the requisite groups, and the χ^2 and degrees of freedom were compared to the χ^2 and degrees of freedom for the independent groups solution.

LISREL was used to evaluate one aspect of the importance of orientations to second language learning--their relation to motivation--as a function of the three contextual factors. The fifth and final set of analyses investigated student endorsements of the importance of the general orientations as a function of the learning context.

Student Endorsements of Orientations

The last analysis used multivariate analysis of variance (MANOVA) to investigate student evaluations of these same orientations as a function of the learning context. A 2 x 2 x 2 factorial design including as factors Ethnolinguistic Group (anglophone or francophone), Target Language (official or minority), and Milieu (unicultural or multicultural) was used to predict dependent variables, the four general orientations found to be common to all of the groups.

Overall MANOVA main and interactive effects were evaluated using Wilks's λ (lambda; Wilks, 1932) and associated approximation to the F distribution (see, e.g., Lindemann, Merenda, and Gold, 1980). For each significant MANOVA effect, follow-up discriminant analysis and univariate analyses of variance (the "protected F approach") were used to determine the contribution of each of the dependent variables to the MANOVA effect.

The protected F approach (see Cramer and Bock, 1966; Hummel and Sligo, 1971; Spector, 1977, 1980) is to follow up a significant multivariate test with univariate F tests (ANOVAs) for each of the dependent variables evaluated over the requisite groups. The multivariate test thus serves to protect against Type I error: no univariate effects are investigated if the overall MANOVA effect is not significant.

A number of authors have criticized the sole use of the protected F approach to investigate MANOVA effects (Borgen and Seling, 1978; Bray and Maxwell, 1982; Kaplan and Litrownik, 1977; Wilkinson, 1975). These authors have pointed out that, although this approach protects against Type I error, the tests are not orthogonal, and therefore do not take into account the multivariate nature of the data, including intercorrelations between the dependent variables. Instead, these authors recommend that the protected F approach be used in conjunction with other tests, in particular, discriminant function analysis. For each effect, these authors point out, MANOVA estimates a vector of weights for the dependent variables along which the groups are maximally separated. Therefore, for each significant effect, a discriminant function analysis is done to define this dimension by estimating the function coefficients (the weights assigned to the dependent variables; Cooley and Lohnes, 1971; Lindemann et al., 1980; Tatsuoka,1971). Two statistics are then used to evaluate the contributions of the individual dependent

variables to the discriminant function (see e.g., Borgen and Seling, 1978; Bray and Maxwell, 1982): the standardized discriminant function coefficients for the variables and the canonical variate correlations. The standardized discriminant function coefficients represent the relative contribution of each variable to the discriminant function. However, the magnitudes of the coefficients are influenced by the intercorrelations between dependent variables and between dependent and independent variables. For this reason, the canonical variate correlations are also examined. These correlations, similar to the factor loadings in an orthogonal factor analysis, are the correlations of the raw dependent variables with the discriminant function variate. A score on the discriminant function is calculated for each subject, and this score is correlated with the dependent variables. As in factor analysis, these correlations can be used to interpret the dimension underlying the dependent variables by assigning importance to the variable commensurate with the size of the correlation coefficient (see Bargmann, 1970).

The foregoing statistics are used to describe the dimension underlying a significant MANOVA effect. It is also necessary to compare multivariate group centroids (means) on this dimension in order to evaluate the relationships between the groups. In the case of interactions, when more than two group centroids are involved, a follow-up test is required to determine which centroids differ significantly from one-another. In the present study, Hotelling's T^2 was used to compare group centroids in evaluating significant interactions (see Bray and Maxwell, 1982; Lindemann et al., 1980).

In summary, multivariate analysis of variance was used to describe how the eight groups of students differed in their endorsements of orientations to learning a second language. Significant MANOVA effects were investigated using a combination of univariate ANOVAS and multivariate discriminant analyses.

RESULTS

Five sets of analyses were completed in order to: (a) Delineate and compare the compositions of orientations to second language learning in the eight different learning contexts; (b) describe the relationships between orientations and motivation in each of the eight groups; (c) develop measures of the orientations common to all groups which could be used in cross-group comparisons; (d) describe the relations between orientations and motivation as a function of the learning context; and (e) determine the effect of the learning context on student endorsements of the importance of orientations.

Composition of Orientations

In this set of analyses, student ratings of the importance of each of the 37 reasons for studying a second language (Table 2) were factor analyzed in each of the eight groups separately. The resulting factors, showing which reasons clustered together to compose the orientations for each group, were then compared across the groups.

Individual Group Factor Analyses

The individual group factor analyses of the ratings of the 37 items each utilized maximum likelihood extraction and varimax rotation (Dixon, 1981). The correlation matrices which were analyzed are presented in Appendix B, Tables B-2 to B-9. Preliminary analyses using the scree test (Catell, 1966) on each group separately, and a factor analysis of a correlation matrix calculated by pooling all eight groups of subjects together (weighting each subject's raw data by the size of the corresponding group), indicated that six factors best represented each of the eight sets of data. The varimax rotated factor matrices for the data from the eight groups are presented in Tables 5 to 12.

Group 1. Table 5 shows the factor loadings for Group 1, the group of anglophone students learning an official language (French) in a unicultural milieu (London, Ontario). Factor I receives appreciable loadings (absolute value greater than .40) from items expressing students' wishes to learn French in order to gain greater understanding about themselves (item 31), about things in general (item 28), and about francophones' lives and culture (items 2, 37, 13, and 9). Factor I also indicates that these students wish to get to know and become friends with francophones (items 25, 1, and 23) and to identify with them (item 35). Both elements of the integrative orientation, developing affective ties (items 25, 1 and 23) and identifying with members of the target group (item 35), figure in this orientation. However, the preponderant loadings are from items concerned with learning about and understanding oneself and members of the target group. For this reason, the dimension has been labeled *Understanding/Identification.* "Understanding" is used here in the sense of developing a sympathetic awareness of oneself and of others, which encompasses learning about and becoming friends with francophones. "Identification" refers to the desire to think and behave like francophones.

Factor II (see Table 5), receives significant loadings from instrumental reasons only, dealing with the advantages accrued at school and at work from learning French (items 30, 4, 18, 6, 19, 22, and 14). For this reason, it has been called an *Instrumental* factor. Factor III is composed of reasons for learning French as an aid to travel (items 36, 10, and 5), to

join a French community (item 7), and to get a job where French is used (item 22). Given the relatively high loading of the three travel items, joining a French community and getting a job where French is spoken appear to be part of the student's travel plans, and the factor was thus labeled as reflecting a *Travel* orientation.

Table 5

Varimax Rotated Factor Matrix for Group 1: Anglophones Learn French (L2) in a Unicultural Milieu

Item	Factor					
	I	II	III	IV	V	VI
1.Be at ease with L2 Canadians	.48	.22	.14	.15	.22	-.11
2.Find out how L2 people live	.61	.08	.20	-.01	.05	.04
3.Be admitted to a higher school	.05	.20	.05	.06	.13	.65
4.Useful in getting a good job	.04	.78	.14	-.06	.18	.16
5.Travel (Canada, Mexico)	.26	.10	.60	.18	.29	.04
6.Need it for future career	.05	.67	.28	.00	.03	.18
7.Become member of L2 community	.38	.24	.43	.15	.01	-.01
8.Study another language later	.31	.04	.32	.26	.09	.30
9.Help understand L2 life	.52	-.08	.33	.09	.07	.03
10.Travel (France, U.S., Spain)	.14	.23	.66	.16	.16	.05
11.Become more knowledgeable	.15	.33	.27	.48	.37	.09
12.To meet some L2 people	.32	.21	.39	.24	.61	-.02
13.Appreciate problems L2 minority	.52	.06	.02	.01	.09	.09
14.To get a degree	.02	.57	.11	.00	.04	.57
15.Understand own language better	.23	.10	.27	.44	.17	.15
16.Make friends with L2 people	.32	.11	.31	.32	.63	-.08
17.Make me appear more cultured	.30	.23	.33	.48	.02	.05
18.To be successful in business	.10	.68	.17	.31	-.05	.05
19.Be useful after I leave school	.15	.59	.31	.19	.11	.09
20.Uneducated unless fluent in L2	.27	.21	.27	.13	-.14	.05
21.Help if I should ever travel	.16	.22	.36	.24	.11	.08
22.Get a job where use L2	.23	.58	.42	.10	-.01	-.01
23.Gain friends among L2 speakers	.43	-.05	.11	.42	.27	.01
24.People will respect me more	.15	.09	.11	.59	-.02	.09
25.Get to know L2 speakers	.60	.05	.19	.24	.27	-.02
26.Influence in my community	.34	.37	.04	.41	-.02	-.16
27.Participate in activities	.36	.35	.21	.33	.18	-.12
28.Acquire ideas, broaden outlook	.40	.27	.34	.32	.13	.08
29.To finish high school	.20	.17	.02	.14	-.21	.64
30.Help get a better paying job	.03	.80	-.05	.19	.02	.21
31.Help learn about myself	.71	.22	.07	.13	-.10	.08
32.Influence over L2 Canadians	.30	.06	-.12	.24	-.41	-.10
33.Meet more and varied people	.38	.30	.35	.32	.38	.01
34.Help if I ever enter politics	-.02	.04	.06	.38	.02	.04
35.Think and behave like L2 people	.45	-.00	.15	.08	-.08	.05
36.Travel to an L2 area	.12	.31	.69	.14	.22	.05
37.Understand L2 art	.57	.04	.04	.13	.06	.16

Factor IV receives significant loadings from items reflecting students learning French in order to gain respect and influence (items 24, 17, and 26) as well as to become more knowledgeable (items 11 and 15) and gain French-speaking friends more easily (item 23). Due to the preponderance of the respect-

seeking items, this dimension has been interpreted as a *Prestige* factor, expressing students learning a second language in order to gain more prestige. Factor V was labeled *Friendship* because items 16 and 22, both items expressing students' desire to be friends with francophones, load highest on this factor. The only other significant loading is from item 32, which expresses an influence-seeking motive for learning French. This loading is negative, suggesting that those students who learn the language in order to gain friends do not do so in order to become more influential. Factor VI, like Factor II, is composed of three instrumental reasons for learning French, but all deal specifically with school (items 3, 29, and 14). For this reason, it has been labeled a *School Instrumental* factor.

Group 2. Table 6 presents the varimax rotated factor analysis of the 37 reasons for learning a second language for Group 2, anglophones learning an official language in a multicultural milieu (Ottawa). This table shows that items loading highest on Factor I concern meeting and making friends with francophones (items 12, 16, 25, 23, and 1) and travelling (items 5, 10, and 36). Two instrumental items (22 and 19), and an item expressing the desire to learn French in order to better understand French art and literature (item 37) also load significantly on this factor. Due to the preponderance of the items concerning friendship and travel, this factor has been labeled a *Friendship/Travel* dimension.

Factor II, like the second factor in the previous analysis, is composed of items suggesting that the second language is being learned for personal advancement in school or in a career (items 30, 3, 14, 6, 4, 29, 19, and 18). This factor has many of the same items as the second factor in Group 1 and it, too, has been labeled an *Instrumental* factor. Factor III is composed of items expressing the students' desire to learn more about francophones (items 2, 9, and 13) and themselves (item 31) as well as to think and behave like francophones (item 35) and join a francophone community (item 7). This factor contains some of the same items as the first factor in Group 1 dealing with learning a second language in order to learn about oneself and to learn about and identify with members of the target culture. However, the affective element of the Group 1 factor--developing friendships with target group members--is not found in Factor III. For these reasons, Factor III has been called a *Knowledge/Identification* factor, expressing students' motivation to learn a second language in order to learn about and to identify with francophones.

Factor IV (Table 6) receives significant loadings from items suggesting that the student is learning French in order to become more influential (items 26, 32, and 18), become more respected (item 17), and get to know francophones (item 25). Because this factor appears to express the goal of learning a second language in order to become influential and, secondarily, to gain respect, it has been labeled an *Influence* dimension.

Factor V has been labeled a *Knowledge* factor. It is composed of but two items, both expressing the desire of the student to become more knowledgeable (items 28 and 11). Unlike Factor III for this group, Factor V does not contain sizeable loadings from items concerned with identifying with the target group. Finally, Factor VI has been named a *Respect* factor after the single item loading significantly on this factor (item 24).

Table 6

Varimax Rotated Factor Matrix for Group 2: Anglophones Learn French (L2) in a Multicultural Milieu

Item	Factor					
	I	II	III	IV	V	VI
1.Be at ease with L2 Canadians	.44	.21	.14	.18	.29	.02
2.Find out how L2 people live	.31	.18	.70	.17	.09	-.10
3.Be admitted to a higher school	.05	.76	-.01	-.20	.20	.19
4.Useful in getting a good job	.31	.60	.04	.20	.38	-.05
5.Travel (Canada, Mexico)	.65	.10	.08	.01	.06	.07
6.Need it for future career	.34	.61	.15	.06	-.00	-.07
7.Become member of L2 community	.30	.10	.57	-.10	-.07	.18
8.Study another language later	.38	.25	.06	.09	.01	.11
9.Help understand L2 life	.22	.18	.67	.17	.06	-.05
10.Travel (France, U.S., Spain)	.56	.17	.14	.03	.13	-.06
11.Become more knowledgeable	.32	.24	.17	-.01	.56	.19
12.To meet some L2 people	.78	.08	.17	.11	.18	.09
13.Appreciate problems L2 minority	.16	-.01	.62	.02	.16	.09
14.To get a degree	-.04	.70	.18	.06	.16	.18
15.Understand own language better	.24	-.16	.21	-.04	.10	.34
16.Make friends with L2 people	.77	-.05	.25	.09	.09	.03
17.Make me appear more cultured	-.07	.24	.17	.56	.08	.27
18.To be successful in business	.12	.48	.15	.44	.20	.07
19.Be useful after I leave school	.45	.48	.03	.18	.34	.01
20.Uneducated unless fluent in L2	.23	.03	.17	.18	.23	.38
21.Help if I should ever travel	.39	.39	-.03	.12	.29	.17
22.Get a job where use L2	.46	.38	.16	.18	-.04	.06
23.Gain friends among L2 speakers	.55	.07	.19	.21	.11	.14
24.People will respect me more	.08	.15	.11	.34	.00	.84
25.Get to know L2 speakers	.61	.03	.19	.42	.31	-.00
26.Influence in my community	.21	.05	.18	.62	.12	.08
27.Participate in activities	.38	.19	.31	.12	.06	.31
28.Acquire ideas, broaden outlook	.17	.12	.10	.04	.65	.05
29.To finish high school	.03	.49	.17	.15	.05	-.20
30.Help get a better paying job	.14	.82	-.04	.29	-.04	.02
31.Help learn about myself	.12	.12	.52	.21	.09	.31
32.Influence over L2 Canadians	.22	.08	.21	.51	-.18	.08
33.Meet more and varied people	.31	.24	.05	.19	.38	-.01
34.Help if I ever enter politics	.14	.16	-.04	.37	.24	.05
35.Think and behave like L2 people	.01	.01	.46	.26	.06	.14
36.Travel to an L2 area	.55	.09	.12	-.04	.23	.20
37.Understand L2 art	.40	.01	.19	.16	.34	.12

Group 3. Table 7 shows the varimax rotated factor matrix for the data from the anglophone group studying a minority language (Spanish) in a unicultural milieu. Items concerned with learning a second language in order to become more influential load significantly on Factor I (items 32 and 26), as do items concerned with succeeding in politics (item 34) or other jobs (items 30 and 18), gaining respect (items 24 and 17) or knowledge (items 31 and 20), and identifying with the Spanish culture (item 35). Some of the items loading significantly on this factor also loaded highly on the factor labeled *Influence* in Group 2 (Table 6, Factor IV) and, although this first factor does include more items than the Group 2 factor, it too has been called an *Influence* orientation due to the preponderance of items concerned with the seeking of influence, respect, and success (items 32, 26, 34, 24, 17, 31, 18, and 20).

Table 7

Varimax Rotated Factor Matrix for Group 3: Anglophones Learn Spanish (L2) in a Unicultural Milieu

Item	Factor					
	I	II	III	IV	V	VI
1.Be at ease with L2 Canadians	.13	.09	.03	-.02	.08	.40
2.Find out how L2 people live	.18	-.01	.29	.09	.26	.51
3.Be admitted to a higher school	-.03	.29	.16	-.04	.48	.04
4.Useful in getting a good job	.09	.76	.13	.07	.18	.18
5.Travel (Canada, Mexico)	.01	.08	-.04	.58	.11	.10
6.Need it for future career	-.01	.87	.04	.28	.15	.20
7.Become member of L2 community	.21	.28	.17	.14	.10	.37
8.Study another language later	.15	.08	.05	.09	.71	.19
9.Help understand L2 life	.23	.05	.45	.07	.06	.49
10.Travel (France, U.S., Spain)	-.04	.09	.06	.68	.05	.10
11.Become more knowledgeable	.22	.20	.40	.06	.39	.04
12.To meet some L2 people	.08	.15	.26	.41	-.16	.61
13.Appreciate problems L2 minority	.14	-.08	.49	-.06	.07	.11
14.To get a degree	.22	.39	.11	.12	.57	-.03
15.Understand own language better	.23	.12	.11	.23	.25	.20
16.Make friends with L2 people	.16	.19	.14	.45	.10	.56
17.Make me appear more cultured	.45	.20	.36	-.04	.08	.11
18.To be successful in business	.42	.51	.13	.17	.30	.10
19.Be useful after I leave school	.04	.66	.06	.26	.22	.15
20.Uneducated unless fluent in L2	.41	.11	.07	.13	.06	.08
21.Help if I should ever travel	.07	.20	.27	.55	.07	-.13
22.Get a job where use L2	.22	.58	-.05	.26	-.03	.23
23.Gain friends among L2 speakers	.31	.08	.26	-.02	.20	.23
24.People will respect me more	.59	.09	.23	.02	.21	.05
25.Get to know L2 speakers	.22	.08	.70	.18	-.14	.25
26.Influence in my community	.64	.09	.14	.06	.07	.19
27.Participate in activities	.21	.16	.52	.11	.29	.18
28.Acquire ideas, broaden outlook	.19	.35	.43	.14	.28	.14
29.To finish high school	.11	.29	.11	-.04	.04	-.19
30.Help get a better paying job	.43	.49	.17	.04	.33	-.19
31.Help learn about myself	.42	.25	.24	.09	.30	.04
32.Influence over L2 Canadians	.76	-.03	.19	-.15	-.14	.09
33.Meet more and varied people	.18	.22	.69	.22	.09	-.09
34.Help if I ever enter politics	.60	.01	.12	-.03	.08	.09
35.Think and behave like L2 people	.47	.16	.12	.22	.10	.11
36.Travel to an L2 area	.09	.16	.09	.89	-.05	.14
37.Understand L2 art	.31	.06	.53	.08	.25	.21

The second factor for this group of anglophones contains significant loadings from items expressing instrumental reasons for learning Spanish (items 6, 4, 19, 22, 18, and 30), and is therefore labeled an *Instrumental* orientation. This factor is composed of the same items as the second factors in the first two groups analyzed (Tables 5 and 6). Factor III is composed of items concerning interacting with hispanophones (items 25 and 33) and learning about their culture (items 37, 27, 13, and 9) as well as gaining general knowledge (items 28 and 11). This factor has been labeled a *Knowledge* factor because, like Factor III in Group 2 (Table 6), learning is emphasized without a concommittant affective component.

Factor IV, with highest loadings from travel items (36, 10, 5, and 21 in Table 7), and two significant loadings from items expressing the desire to meet Spanish-speaking people (items 16 and 12), appears best labeled a *Travel* orientation. The composition of this factor is similar to that of the *Travel* factor in Group 1, Factor III (Table 5), in that the highest loadings come from travel items.

Factor V (Table 7) contains significant loadings from items 8, 14, and 3, each concerned with school advancement. This factor has, therefore, been named an *Instrumental (advancement)* factor. The loadings on Factor VI suggest that an orientation to learning Spanish for these students combines making friends with and achieving a better understanding of hispanophones (items 12, 16, and 1, and items 2 and 9, respectively). The relative sizes of the loadings suggest that developing affective ties is emphasized over understanding. The factor has therefore been labeled *Friendship/Understanding*.

Group 4. Table 8 presents the factor matrix for the last group of anglophones studied, those learning a minority language in a multicultural milieu. Table 8 shows that Factor I for this group is, with one exception (item 7), composed of items concerned with personal advancement (items 6, 19, 22, 14, 4, 3, 30, and 18). As with similar factors in the previous analyses (Factor II in Groups 1, 2, and 3), this factor has been labeled *Instrumental*.

Factor II in Table 8 contains substantial loadings from items reflecting influence-seeking reasons for learning a second language (items 26 and 32), as well as personal advancement (items 30, 29, and 18), and respect-seeking reasons (items 20, 17, and 24). Last, item 31, to "learn about myself" also loads substantially on this factor. This factor is similar in composition to the *Influence* factor for Group 3 (see Table 7), and has also been labeled *Influence*. Factor III receives significant loadings from items concerned with meeting and becoming friends with hispanophones (items 12, 16, 25, 27, and 23). It has therefore been labeled a *Friendship* factor. Item 7, learning Spanish in order to join a Spanish community, has a border line loading on this factor, indicating that identification with

hispanophones may be an important part of this factor and that this factor may closely resemble the integrative orientation.

Factor IV receives significant loadings from items expressing the students' desire to learn about the way of life of Spanish people (items 9, 2, and 37 in Table 8) and about themselves (items 31 and 15), to broaden their knowledge (item 28), and to think and behave like Spaniards (item 35). This orientation appears to combine knowledge-seeking reasons with the desire to identify with Spaniards and has thus been called a *Knowledge/Identification* factor. It is similar in composition to the factor of the same name in Group 2 (Table 6, Factor III).

Table 8

Varimax Rotated Factor Matrix for Group 4: Anglophones Learn Spanish (L2) in a Multicultural Milieu

Item	Factor					
	I	II	III	IV	V	VI
1.Be at ease with L2 Canadians	.17	.33	.16	.21	.14	.05
2.Find out how L2 people live	.20	-.04	.13	.68	.12	.26
3.Be admitted to a higher school	.60	.13	.10	.14	.05	.08
4.Useful in getting a good job	.72	.20	.05	.25	.04	.19
5.Travel (Canada, Mexico)	.13	.07	.16	.03	.74	.21
6.Need it for future career	.83	.05	.01	.04	.08	.14
7.Become member of L2 community	.47	.03	.37	.17	.04	-.14
8.Study another language later	.19	-.16	.14	.29	.22	.40
9.Help understand L2 life	.04	.19	.05	.70	-.04	.05
10.Travel (France, U.S., Spain)	.11	.09	.09	.07	.97	.04
11.Become more knowledgeable	.20	.19	.08	.22	.18	.79
12.To meet some L2 people	.18	.14	.79	.00	.39	.05
13.Appreciate problems L2 minority	-.11	.32	.11	.31	.04	.45
14.To get a degree	.75	.22	-.04	.07	.09	-.02
15.Understand own language better	.10	-.04	.00	.40	-.01	.24
16.Make friends with L2 people	.26	.12	.77	.18	.39	.03
17.Make me appear more cultured	-.02	.49	.25	.04	.17	.19
18.To be successful in business	.43	.46	.11	-.06	.09	.16
19.Be useful after I leave school	.78	.11	.06	.16	.16	.12
20.Uneducated unless fluent in L2	.10	.55	.09	-.01	-.04	.04
21.Help if I should ever travel	.22	.12	-.05	.20	.45	.48
22.Get a job where use L2	.77	.03	.28	-.07	.26	.02
23.Gain friends among L2 speakers	-.04	.34	.49	.22	-.02	.06
24.People will respect me more	-.14	.42	.14	.09	-.04	.22
25.Get to know L2 speakers	.07	.25	.71	.08	.05	.08
26.Influence in my community	.22	.64	.05	.11	.02	-.12
27.Participate in activities	.09	.10	.54	.29	.01	.30
28.Acquire ideas, broaden outlook	.14	.16	.05	.59	.10	.39
29.To finish high school	.30	.51	-.15	.15	.11	-.08
30.Help get a better paying job	.55	.62	.03	.00	.01	.20
31.Help learn about myself	.15	.42	.27	.43	.10	.16
32.Influence over L2 Canadians	.06	.62	.09	.02	.03	-.03
33.Meet more and varied people	.31	-.01	.31	.29	.05	.48
34.Help if I ever enter politics	.28	.37	.19	.12	.12	.15
35.Think and behave like L2 people	.18	.31	.14	.47	.07	-.16
36.Travel to an L2 area	.21	.06	.26	.13	.77	.05
37.Understand L2 art	-.02	.04	.28	.55	.17	.10

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Factor V in Table 8 receives significant loadings from four items concerned with learning a second language in order to travel (items 10, 36, 5, and 21) and has been called a *Travel* factor. Factor VI receives appreciable loadings from variables concerned with students' acquisition of knowledge (items 11, 13, and 8) and an interest in meeting people (item 33) and in travelling (item 21). This orientation appears to express students' interest in acquiring knowledge in general, with little interest in developing affective relations with hispanophones. Consequently, it has been named a *Knowledge* factor.

Group 5. The results from the first francophone group analyzed, francophones learning an official language (English) in a relatively unicultural milieu (Québec city), are shown in Table 9. Examining this table, it will be seen that Factor I contains appreciable loadings from a number of items concerned with the acquisition of knowledge about anglophones, oneself, or things in general (items 2, 9, 13, 28, 31, and 11), as well as from items showing students' concern with gaining respect (item 24) and influence (item 26) and getting to know anglophones (items 25 and 27). This constellation of items suggests that those students who seek to learn English in order to acquire greater knowledge also do so in order to gain greater respect from others. This factor has thus been labeled a *Knowledge / Respect* factor.

The second factor obtained for this group of francophones is composed of items dealing with learning English in order to make friends with anglophones (items 16, 23, 12, and 25) as well as getting a job where English is used (item 22) and better understanding anglophones (item 9). Getting a job and understanding anglophones as expressed in the last two items appear to subserve the desire to make friends with anglophones expressed by the four predominant loadings. Factor II has thus been named a *Friendship* factor. Factor III has been labeled an *Instrumental* factor as it contains appreciable loadings from items expressing utilitarian reasons for learning English (items 6, 3, 4, 30, and 18). Factor IV has four items concerned with learning English in order to travel (items 36, 21, 5, and 10). It has thus been labeled a *Travel* factor.

Factor V receives appreciable loadings from three items, numbers 17, 20, and 26, suggesting that one reason these students study English is to appear more educated and to be more influential. This factor has thus been labeled a *Prestige* factor. Factor VI receives appreciable loadings from only two variables, a high positive loading from item 33 (to learn English in order to meet more people), and a high negative loading from item 37 (in order to integrate into an anglophone community). This combination of the desire to meet people but not to integrate into the target community while learning the language has been labeled a *Distant Interest* dimension. Nothing similar to this factor was encountered in the analyses of the four anglophone groups.

Table 9

Varimax Rotated Factor Matrix for Group 5: Francophones Learn English (L2) in a Unicultural Milieu

Item	Factor					
	I	II	III	IV	V	VI
1.Be at ease with L2 Canadians	.08	.32	.08	.19	.10	.13
2.Find out how L2 people live	.69	.23	.16	.13	-.07	-.15
3.Be admitted to a higher school	.09	.19	.61	-.03	.01	.24
4.Useful in getting a good job	.18	.15	.61	.19	-.03	.07
5.Travel (Canada, Mexico)	-.00	.34	.14	.53	.19	.05
6.Need it for future career	-.05	.01	.69	.09	.01	-.11
7.Become member of L2 community	.10	.08	.05	.01	.05	-.51
8.Study another language later	.15	.10	.14	.13	.12	.16
9.Help understand L2 life	.61	.46	.13	.03	-.04	-.01
10.Travel (France, U.S., Spain)	.00	.31	.16	.46	.00	-.25
11.Become more knowledgeable	.45	.11	.18	.29	.15	.22
12.To meet some L2 people	.25	.63	.11	.14	.02	-.04
13.Appreciate problems L2 minority	.57	.22	-.00	-.11	.09	.00
14.To get a degree	-.07	.03	.39	.14	.24	-.07
15.Understand own language better	.43	.17	-.06	-.00	.15	-.04
16.Make friends with L2 people	.18	.77	.04	.27	.11	.04
17.Make me appear more cultured	.21	.04	.17	.05	.78	-.02
18.To be successful in business	.18	.32	.41	.00	.35	.03
19.Be useful after I leave school	.36	.23	.35	.13	.08	.27
20.Uneducated unless fluent in L2	.30	.07	.10	-.02	.54	-.14
21.Help if I should ever travel	.13	.20	.23	.54	-.08	.38
22.Get a job where use L2	.14	.47	.14	.27	.05	-.08
23.Gain friends among L2 speakers	.11	.73	.05	.24	.13	.11
24.People will respect me more	.55	.05	.15	.07	.34	-.04
25.Get to know L2 speakers	.41	.59	.12	.02	-.05	.08
26.Influence in my community	.41	.13	.09	.09	.40	.13
27.Participate in activities	.41	.26	-.00	.09	.06	.29
28.Acquire ideas, broaden outlook	.53	.01	.14	.08	.11	.22
29.To finish high school	.09	.05	.17	.32	.18	-.04
30.Help get a better paying job	.18	-.05	.48	.21	.10	.02
31.Help learn about myself	.49	.08	.07	.06	.05	-.04
32.Influence over L2 Canadians	.22	-.02	-.07	.02	.16	-.09
33.Meet more and varied people	.04	.38	.23	.01	-.02	.59
34.Help if I ever enter politics	-.02	.08	-.04	.13	.31	.21
35.Think and behave like L2 people	.32	.13	.09	.19	.26	-.00
36.Travel to an L2 area	.09	.27	.07	.67	-.01	.09
37.Understand L2 art	.24	.35	-.09	.04	.14	.23

Group 6. The varimax rotated factor matrix for francophones learning an official language in a multicultural milieu (Ottawa), is shown in Table 10. Factor I in this table is composed chiefly of two sorts of items: those dealing with learning English for use while travelling (items 21, 36, 10, and 5) and in order to meet and make friends with anglophones (items 16, 25, 12, 1, and 23). Item 34, learning English for help in later political activities, also loads appreciably on this factor. The factor has been named *Travel/Friendship* after the variables providing the predominant loadings. It is similar to the first factor of Group 2 (Table 6), although the relative importance of the travel and friendship items is reversed in the Group 2 factor.

Table 10

Varimax Rotated Factor Matrix for Group 6: Francophones Learn English (L2) in a Multicultural Milieu

Item	Factor					
	I	II	III	IV	V	VI
1.Be at ease with L2 Canadians	.44	.26	.01	-.13	.25	.07
2.Find out how L2 people live	.16	.53	-.04	.08	.12	-.02
3.Be admitted to a higher school	-.04	.32	.21	-.17	.31	.36
4.Useful in getting a good job	-.02	-.01	-.03	.02	.27	.46
5.Travel (Canada, Mexico)	.46	.24	-.12	.30	.27	.00
6.Need it for future career	.24	.11	.03	.01	.69	.10
7.Become member of L2 community	.07	.06	.11	.63	.05	.08
8.Study another language later	.27	.44	.22	-.03	.11	.08
9.Help understand L2 life	.24	.61	.09	.35	.01	.08
10.Travel (France, U.S., Spain)	.50	.13	.02	.45	.02	-.09
11.Become more knowledgeable	.06	.38	.25	-.05	.21	.06
12.To meet some L2 people	.47	.37	.11	.27	.09	.17
13.Appreciate problems L2 minority	.13	.53	.15	.12	-.14	.18
14.To get a degree	.11	.07	-.07	.01	.23	.65
15.Understand own language better	.07	.46	.31	.31	-.01	-.06
16.Make friends with L2 people	.60	.19	.15	.15	.08	.03
17.Make me appear more cultured	.10	.32	.33	.10	.17	.19
18.To be successful in business	.09	-.03	.15	.11	.77	.21
19.Be useful after I leave school	.05	.15	.21	.05	.71	.28
20.Uneducated unless fluent in L2	.10	.17	.26	.26	.11	.20
21.Help if I should ever travel	.66	.11	.07	.07	.12	.09
22.Get a job where use L2	.36	.03	.31	.55	.03	.09
23.Gain friends among L2 speakers	.44	.03	.44	.10	.13	-.03
24.People will respect me more	.09	.17	.44	.12	.00	.06
25.Get to know L2 speakers	.48	.30	.32	.28	-.06	-.03
26.Influence in my community	.28	.08	.52	.31	.06	.14
27.Participate in activities	.24	.14	.61	.03	.08	-.09
28.Acquire ideas, broaden outlook	.38	.29	.44	.08	-.01	-.09
29.To finish high school	.11	.09	.01	.11	.04	.79
30.Help get a better paying job	.04	-.15	.49	.05	.29	.20
31.Help learn about myself	.10	.52	.46	.38	.01	-.06
32.Influence over L2 Canadians	-.04	.08	.26	.11	.00	-.08
33.Meet more and varied people	.10	.26	.32	-.03	.16	-.04
34.Help if I ever enter politics	.44	-.05	.19	.00	.11	.22
35.Think and behave like L2 people	.14	.33	.25	.51	.02	.01
36.Travel to an L2 area	.66	.08	.13	.42	-.08	-.10
37.Understand L2 art	.37	.21	.23	-.01	-.06	.20

Table 10 shows that Factor II for Group 6 receives appreciable loading from items concerned with students learning about anglophones, about themselves, and about things in general (items 9, 13, 2, 31, 15, and 8). This factor, expressing students learning a second language in order to be more knowledgeable, has been encountered in Groups 2 (Factor V), 3 (Factor III), 4 (Factor VI) and 5 (Factor I). As with these other groups, the factor has here been labeled a *Knowledge* factor.

Factor III in Table 10 receives appreciable loadings from variables concerned with learning English in order to participate in English cultural activities (item 27), to become more influential (item 26), to get a better paying job (item 30), to learn about oneself (item 31) and to broaden one's outlook (item

28), to gain more respect (item 24), and to gain friends more easily (item 23). This combination of items appears to express students' desire to learn English in order to improve their social standing in the community (multicultural Ottawa)--to be more involved in cultural activities, be more respected, and get a higher paying job. The factor has thus been labeled a *Social/Cultural* factor, with the intent that the name express the desire to participate in the cultural affairs of a socially prestigious group. No factor similar to this one has appeared in the previous analyses.

Factor IV (Table 10) receives significant loadings from items suggesting that one orientation for these students learning English is to better identify with the English-speaking community (items 7 and 35), to get a job where English is spoken (item 22), and to travel to areas where English is spoken (item 36). The identification component of this orientation is stronger than in any of the other groups, but no affective component is present. The factor thus cannot be said to represent an integrative orientation, but has instead been labeled *Identification/Travel*.

Factors V and VI both represent instrumental orientations. Factor V has been labeled *Career Instrumental* because it contains variables dealing with future career advancement (items 18, 19, and 6) while Factor VI has been labeled *School Instrumental* because it contains items dealing with school advancement (29, 14, and 4).

Group 7. Table 11 presents the varimax rotated matrix of factor loadings for Group 7, the group of francophones studying a minority language (Spanish) in a unicultural milieu. Factor I in this table contains many of the same items as Factor I in Group 6 (Table 10), the *Travel/Friendship* factor. In Group 7, the items loading significantly on Factor I include those dealing with travel (21, 5, 36, and 10), with making friends (12, 23, 16, 33, and 1), and with learning (8, 11, and 9). This factor, like Factor I in the previous group, has been named a *Travel/Friendship* factor due to the predominant loading of those items dealing with travel and friendship-seeking reasons for learning Spanish. Factor II likewise is similar to factors in analyses presented earlier. All of the items in Factor II concern learning Spanish for personal utilitarian reasons (items 6, 3, 4, 19, 30, 22, 18, 29, and 14) and this factor has thus been given the label *Instrumental*.

Table 11 indicates that Factor III receives appreciable loadings from items expressing students' desires to learn Spanish in order to become more influential (item 26) and to gain respect (item 24). Related to these on this factor are items expressing the students' desires to become more closely identified with Spanish communities, including joining one (item 7), participating in its activities (item 27), learning about hispanophones (items 13 and 25) and thinking and behaving like

Table 11

Varimax Rotated Factor Matrix for Group 7: Francophones Learn Spanish (L2) in a Unicultural Milieu

Item	Factor I	II	III	IV	V	VI
1.Be at ease with L2 Canadians	.41	.21	-.05	.53	.11	-.04
2.Find out how L2 people live	.23	-.02	.22	.85	.06	.07
3.Be admitted to a higher school	.07	.82	-.02	-.08	-.00	-.07
4.Useful in getting a good job	-.01	.82	.07	.20	-.00	-.10
5.Travel (Canada, Mexico)	.73	.24	-.02	.12	-.04	-.06
6.Need it for future career	-.01	.84	.03	.18	.08	-.04
7.Become member of L2 community	.09	.03	.59	.01	-.16	-.06
8.Study another language later	.61	.14	.24	-.03	.08	.14
9.Help understand L2 life	.47	-.04	.16	.50	.09	.08
10.Travel (France, U.S., Spain)	.65	-.13	.06	-.01	-.04	-.16
11.Become more knowledgeable	.55	-.06	.22	.14	.13	-.12
12.To meet some L2 people	.70	.03	.24	.23	-.00	-.35
13.Appreciate problems L2 minority	.32	.08	.50	.25	.09	-.28
14.To get a degree	.00	.55	.21	-.05	-.03	.00
15.Understand own language better	.19	.06	.24	.38	.16	-.20
16.Make friends with L2 people	.60	.14	.39	.23	.18	-.11
17.Make me appear more cultured	.16	.33	.32	.17	.03	.12
18.To be successful in business	.09	.64	.24	.12	.06	.03
19.Be useful after I leave school	.19	.76	-.03	.03	.06	-.01
20.Uneducated unless fluent in L2	-.01	.13	.25	-.13	-.17	.05
21.Help if I should ever travel	.82	.14	.01	.18	.10	.27
22.Get a job where use L2	.34	.71	.15	-.00	.14	.10
23.Gain friends among L2 speakers	.66	.06	.29	.09	.14	.15
24.People will respect me more	.05	.17	.61	.19	.01	.24
25.Get to know L2 speakers	.39	.13	.46	.37	.19	.15
26.Influence in my community	.09	.13	.66	.05	-.08	.25
27.Participate in activities	.32	.17	.52	.18	.19	.28
28.Acquire ideas, broaden outlook	.39	.06	.38	-.01	.82	.18
29.To finish high school	.02	.59	.16	-.05	-.19	.19
30.Help get a better paying job	.03	.74	.15	-.08	.01	.12
31.Help learn about myself	.11	.21	.43	-.12	.20	-.03
32.Influence over L2 Canadians	.03	-.02	.19	-.27	-.43	.05
33.Meet more and varied people	.60	.27	.22	.08	.17	.46
34.Help if I ever enter politics	.02	.09	.48	.08	.18	-.14
35.Think and behave like L2 people	.16	.06	.50	.05	-.04	-.11
36.Travel to an L2 area	.67	.21	-.03	.23	-.12	.14
37.Understand L2 art	.27	.04	.39	.20	.28	.07

hispanophones (item 35). Item 34, learning Spanish as a help in politics, also loads significantly on this factor as does item 31, learning Spanish in order to learn about oneself. This factor is composed of items that have been part of influence and knowledge orientations (see Table 7, Factors I and III), as well as the identification items. Because the influence and respect items (26 and 24) load higher on this factor than do the knowledge items (27, 13, and 25), this factor has been labeled an *Influence/Identification* factor. The constellation of items composing this factor suggests that those francophone students who learn Spanish in order to identify with the target community also learn it in order to become influential and respected.

Factor IV (Table 11) receives significant loadings from three items expressing students' desires to learn about hispanophones (items 2 and 9) and to feel more at ease with them (item 1). Factor IV has been labeled a *Knowledge* factor.

Factor V receives appreciable loadings from only two variables, learning Spanish in order to become more educated (item 28) and a negative loading from an item concerned with gaining influence over hispanophones through knowing their language (item 32). These loadings, with smaller bordeline loadings (items 37 and 31 correlate between .2 and .3 with Factor V) suggest that one reason for learning Spanish for these students is largely intellectual, coupled with a lack of desire to influence others. The factor has thus been labeled an *Intellectual* factor. Factor VI has but one significant loading, item 33, which states that Spanish is learned in order to allow one to meet more people. The next highest loading is negative and comes from item 12 which suggests that those students who wish to meet more people do not wish these people to be hispanophones. This factor, like the sixth factor of Group 5 (see Table 9), has been called a *Distant Interest* factor. Although the scree test (Catell, 1966) would suggest that six factors are important for this group, the paucity of variables loading substantially on these last two factors suggests that a smaller number of factors might account for the common variance in these data.

Group 8. The varimax rotated factor matrix for the eighth and final group of students, francophones learning a minority language in a multicultural milieu, is presented in Table 12. Factor I in Table 12 is similar in composition to the first factor in two other francophone groups, Groups 6 and 7 (Tables 10 and 11). It is composed of items concerned with learning Spanish for travel purposes (items 36, 21, 5, and 10) and for meeting people and making friends (items 12, 23, 16, and 25). As in Groups 6 and 7, this factor has been labeled a *Travel/Friendship* factor.

Factor II is also similar to factors found in other groups, composed of items suggesting that one orientation to learning Spanish for this group is *Instrumental*: learning for personal utility and advancement reasons (items 6, 4, 30, 19, 18, 22, 3, and 11). Examining Tables 5 to 11 successively, it will be noted that a similar instrumental factor exists in all groups but Group 6, where there exist school and career instrumental factors.

Factor III (Table 12) contains appreciable loadings from four items which suggest that related reasons for learning Spanish for this group of francophones are to become more cultured (item 17) and respected (item 24) as well as to become more knowledgeable (item 11) and to better understand French (item 15). Because the two most important items on this factor deal with students seeking greater esteem through learning, this

Table 12

Varimax Rotated Factor Matrix for Group 8: Francophones Learn Spanish (L2) in a Multicultural Milieu

Item	Factor					
	I	II	III	IV	V	VI
1.Be at ease with L2 Canadians	.29	.17	.07	.00	.21	.18
2.Find out how L2 people live	.09	.13	-.05	.04	.17	.57
3.Be admitted to a higher school	.08	.43	.04	-.10	.15	-.26
4.Useful in getting a good job	.28	.70	-.07	.06	-.24	.07
5.Travel (Canada, Mexico)	.61	.28	-.17	.06	.07	.19
6.Need it for future career	.20	.78	-.10	.10	-.07	.02
7.Become member of L2 community	.12	.03	-.06	.14	.57	.12
8.Study another language later	-.01	.29	.05	.22	-.10	-.07
9.Help understand L2 life	.15	-.04	-.22	.21	.29	.46
10.Travel (France, U.S., Spain)	.60	.07	-.00	-.01	.13	.10
11.Become more knowledgeable	-.01	.41	.47	.16	-.21	.18
12.To meet some L2 people	.63	.16	-.01	.12	.35	-.28
13.Appreciate problems L2 minority	-.02	.11	.08	.23	.42	.06
14.To get a degree	-.06	.39	.25	-.14	.32	.05
15.Understand own language better	.04	-.08	.42	.42	-.09	.12
16.Make friends with L2 people	.45	.14	.07	.20	.48	-.23
17.Make me appear more cultured	.08	.07	.90	.06	.03	-.18
18.To be successful in business	-.15	.58	.26	.09	.12	.12
19.Be useful after I leave school	.13	.60	.19	-.03	.01	.18
20.Uneducated unless fluent in L2	.03	-.09	.25	-.06	.49	-.03
21.Help if I should ever travel	.67	.03	.11	.04	-.26	.01
22.Get a job where use L2	.32	.47	-.18	.09	.29	-.06
23.Gain friends among L2 speakers	.48	.06	.04	.34	.23	-.31
24.People will respect me more	-.05	.08	.70	.09	.20	-.08
25.Get to know L2 speakers	.43	.06	.04	.28	.16	.08
26.Influence in my community	.01	.15	.39	.35	.21	.05
27.Participate in activities	.02	.08	.06	.70	.02	.04
28.Acquire ideas, broaden outlook	.02	.13	.32	.26	-.09	.58
29.To finish high school	-.00	.17	.36	.05	.25	.16
30.Help get a better paying job	.06	.64	.25	.09	.05	.13
31.Help learn about myself	-.07	.20	.38	.30	.08	.29
32.Influence over L2 Canadians	.09	-.23	.11	-.11	.41	.20
33.Meet more and varied people	.37	.03	.13	.32	-.21	.09
34.Help if I ever enter politics	.11	.07	.02	.60	.06	.02
35.Think and behave like L2 people	.24	-.03	.08	.44	.21	.03
36.Travel to an L2 area	.78	-.04	-.10	-.06	-.03	.03
37.Understand L2 art	.00	.02	.09	.37	.04	.22

factor has been labeled a *Prestige* factor. The four highest loading variables are the same as those on the *Prestige* factor in Group 1 (see Table 5, Factor IV).

Factor IV (Table 12) evidences high loadings on four apparently disparate items. Learning Spanish in order to participate in cultural activities (item 27) is related on this factor to learning for possible future political help (item 34), to helping the student think and behave like hispanophones (item 35), and to enabling the student to better understand his own language (item 15). This factor has been named a *Social* factor, giving greatest weight to the items with the two highest loadings.

Factor V is composed of items concerning learning Spanish in order to join a Spanish community (item 7), gain respect and influence (items 20 and 32), and to make friends with and better understand hispanophones (items 16 and 13). This factor has been labeled an *Integration/Influence* factor, combining both aspects of the integrative orientation (identification with or desire to join the second community and the expression of positive affect toward members of that community) with the desire to be influential in the community. This factor combines what have been called "instrumental" reasons (influence-seeking) and integrative reasons for learning a second language.

Finally, Factor VI (see Table 12) is composed of three items, each concerned with learning Spanish in order to gain more knowledge, either knowledge in general (item 28) or knowledge about hispanophones (items 2 and 9). The factor has therefore been labeled a *Knowledge* factor.

Summary of individual group factor analyses. The results of each of the eight separate factor analyses are summarized on the left side of Table 13 where the factors, ordered from Groups 1 to 8, are numbered from 1 to 48. The eight factor analyses yielded different results for instrumental and integrative orientations. The results suggest that the instrumental orientation is an orientation present in each of the groups. Except in Group 6 (francophones learning an official language in a multicultural milieu), where separate instrumental orientations for school and career advancement existed, each group manifested an orientation defined by instrumental reasons alone: learning a second language in order to advance one's own school and career opportunities. The integrative orientation, on the other hand, defined as learning a second language in order to identify with affectively valued members of the second language community even, in the extreme, to the extent of joining that community, did not emerge in its "pure" form in any of the analyses. The *Friendship* factor of Group 4 (Table 8, Factor III and the *Understanding/Identification* factor of Group 1 (Table 5, Factor I) most approximate this strict definition of the integrative orientation. However, in the former case, the identification aspect of the integrative orientation is included on the factor only in the bordeline loading of item 7 and, in the latter case, the integrative orientation appears to be subsumed by the desire to acquire more knowledge and to understand the target group culture. Similar to this latter case, the *Integrative/Influence* factor of Group 8 (Table 12, Factor V) is more complex than the integrative orientation alone, combining what has sometimes been called an "instrumental" orientation, influence-seeking (see Gardner, et al., 1974) with an integrative orientation. In the remaining groups, the identification and affective aspects of the integrative orientation are represented on different factors; often friendship-seeking--the affective element--is associated with the desire to meet members of the second language group only as a traveller (Groups 2, 6, 7, and 8).

Table 13*

Varimax Rotated Factor Matrix: Relationships Between First Order Factors

Variable	Factors I	II	III	IV	V	VI	VII	VIII	IX
Group 1: Anglophones learn official language, unicultural									
1 Understanding/Identification	-37	-08	17	-09	70	-09	08	36	04
2 Instrumental	90	04	-13	04	-12	00	13	09	-01
3 Travel	00	90	07	-08	06	00	-26	-02	-09
4 Prestige	-25	-01	08	28	-18	71	10	29	-16
5 Friendship	-01	20	82	32	-01	-07	-26	-04	01
6 School instrumental	20	-12	-24	06	-11	02	-36	-15	82
Group 2: Anglophones learn official language, multicultural									
7 Friendship/Travel	-03	49	76	-03	-05	-16	-02	-05	-21
8 Instrumental	75	-13	-18	09	-19	-07	-02	-18	40
9 Knowledge/Identification	-22	-17	02	-39	78	-12	-07	02	-04
10 Influence	-01	-29	-02	-02	-04	28	83	08	-20
11 Knowledge	09	11	06	69	23	02	-03	04	02
12 Respect	-17	-06	-08	-07	-08	73	-20	18	-07
Group 3: Anglophones learn minority language, unicultural									
13 Influence	-20	-37	-31	-23	-14	37	45	24	-35
14 Instrumental	93	-02	-07	01	-11	-16	01	05	-04
15 Knowledge	-22	-15	20	44	38	-03	12	47	06
16 Travel	00	88	10	-02	-13	-08	-13	00	-15
17 Instrumental (advancement)	20	-28	-25	29	-02	16	-59	00	13
18 Friendship/Understanding	-08	-06	64	-30	39	-12	-17	-12	-38
Group 4: Anglophones learn minority language, multicultural									
19 Instrumental	85	-03	-07	-08	-18	-30	-10	-07	12
20 Influence	-02	-32	-25	-17	-13	32	66	-02	07
21 Friendship	-15	04	85	-12	-00	01	05	29	-13
22 Knowledge/Identification	-26	-12	-12	19	73	-30	-13	17	-01
23 Travel	-11	80	02	-06	-12	-09	-04	-24	-04
24 Knowledge	01	02	-03	74	13	23	-23	-04	-13
Group 5: Francophones learn official language, unicultural									
25 Knowledge/Respect	-17	-18	-06	09	80	27	02	13	-16
26 Friendship	-11	17	90	-05	08	-09	06	03	-02
27 Instrumental	87	-06	-04	13	-04	00	-07	-25	25
28 Travel	-00	87	-03	08	-15	-02	06	-21	05
29 Prestige	-07	-19	-11	-10	-16	73	34	-13	05
30 Distant interest	-04	-04	08	87	-16	-07	10	19	06
Group 6: Francophones learn official language, multicultural									
31 Travel/Friendship	-25	63	48	15	-11	-17	12	05	00
32 Knowledge	-34	-12	13	11	72	09	-33	-13	08
33 Social/Cultural	-08	-24	-02	15	-05	39	18	73	-06
34 Identification/Travel	-10	43	-04	-73	17	01	-01	27	-14
35 Career instrumental	78	-04	-01	09	-10	08	-03	-19	-17
36 School instrumental	27	-21	-14	-15	-15	-04	07	-10	80
Group 7: Francophones learn minority language, unicultural									
37 Travel/Friendship	-28	65	46	28	-05	-09	-15	04	-01
38 Instrumental	86	-12	-04	01	-23	-09	-03	-02	30
39 Influence/Identification	-31	-37	08	-26	13	33	07	59	-10
40 Knowledge	-06	00	30	11	66	-13	03	-27	-14
41 Intellectual	06	-02	08	53	28	-04	-25	39	-15
42 Distant interest	-04	08	-23	37	-04	02	42	38	15
Group 8: Francophones learn minority language, multicultural									
43 Travel/Friendship	-06	82	42	02	-10	-16	13	-09	-03
44 Instrumental	92	-10	01	07	-12	-08	-13	-08	05
45 Prestige	-03	-15	-20	14	04	83	23	01	13
46 Social	-26	-23	15	16	04	-03	-06	66	-27
47 Integration/Influence	-20	-21	22	-79	07	02	11	-02	07
48 Knowledge	-01	05	-46	15	68	-27	10	-01	-14

Note. The decimal point has been omitted from all loadings.

*This table was previously used for the subject of an article published in *Language Learning* (1983, *33*, 273-291).

In addition to the *Travel* and *Travel/Friendship* orientations, several additional orientations emerged from these analyses which were widely represented in the groups. *Understanding* or *Knowledge* orientations--learning a second language in order to learn about oneself and others, and specifically about the target group--appeared in all groups as did more strictly intellectual orientations--"learning for the sake of

learning" (Factor V in Group 7, see Table 11; and the *Distant Interest* factors in Groups 5 and 7, Factor VI in both Tables 9 and 11). The desire to learn a second language in order to gain influence and/or prestige appears as an orientation in all groups except Group 6 (see Table 10). Finally, students in Groups 6 and 8 expressed the desire to learn a second language in order to be more active in cultural activities.

While a number of factors, such as the *Instrumental, Friendship,* or *Travel* factors, have here been implicitly construed as defining similar orientations in different groups, the comparisons are at best inexact. In order to determine which orientations are common to a number of groups and which are unique to a particular group, a more precise comparison process is required. This was accomplished in the inter-group factor analysis.

Inter-group Factor Analysis

In order to compare the 48 factors, a 48 x 48 matrix was computed by correlating the Fisher z transformed factor loadings of all pairs of factors obtained for the eight groups. Correlations between orientations derived from the same group were set to zero and the resulting matrix (Table B-10 Appendix B) was factor analyzed using the principal component procedure with varimax rotation.

The extraction procedure produced 12 factors with eigen values greater than unity. Upon examination of the varimax rotated solution for these 12 factors, the last three factors appeared to be similar in interpretation to three other factors. In addition, Catell's scree test (Catell, 1966) suggested that nine factors should be retained and interpreted. Hence, nine factors, accounting for 80.5% of the variance, were rotated to simple structure using the varimax method. The resulting factor loading matrix is shown in Table 13. In this table, the six orientations from each of the eight groups are shown as variables 1 to 48 on the left side of the table.

In order to interpret the factors shown in Table 13, it is necessary to account for the origin as well as the nature of orientations loading significantly on a factor. Not only is the type of orientation important (e.g., instrumental or friendship), but so is the group from which it originates. Factors containing orientations common to all groups can be interpreted as *general* factors while interpretations of factors containing orientations from a subset of the groups must account for the constellation of groups represented on these factors.

Table 13 shows that Factor I receives significant loadings (absolute value greater than .45) from eight variables, all of which are instrumental orientations (variables 14, 44, 2, 27,

38, 19, 35, and 8). Because each group contributes an instrumental orientation to Factor I in Table 13, it has been named a *General Instrumental* factor.

Factor II similarly receives appreciable loadings from one variable in each group, either orientations concerned with travel (variables 3, 16, 28, and 23) or, for those groups where travel and friendship reasons for learning a second language loaded substantially on the same factor, travel and friendship (variables 43, 37, 31, and 7). This factor has been labeled *General Travel* due to the preponderance of the travel orientation loadings and because of its relationship to Factor III, which appears to be the obverse of Factor II.

Factor III receives appreciable loadings from the same travel and friendship orientations as Factor II (variables 7, 31, 37, and a borderline loading from variable 43), but preponderant loadings from the friendship orientations (variables 26, 21, and 5 as well as variable 18, which includes both friendship and understanding). Including the borderline loading from variable 43, Factor III, like the first two factors, receives significant loadings from each of the groups, and it has therefore been called a *General Friendship* factor. In addition to the borderline loading from variable 43, Group 8 (francophones learning a minority language in a multicultural milieu) contributes a negative loading from variable 48, a knowledge-seeking orientation to second language learning. Knowledge-seeking without a concommitant positive affective regard toward target group members defines the negative pole of this *General Friendship* factor.

Factor IV receives significant loadings from orientations concerned with students expressing a distant interest in the second culture (variable 30) and in gaining more knowledge (variables 24, 11, and 41). In addition, the negative pole of this factor is defined by two orientations composed of identification items (variables 47 and 34) from the francophone groups in multicultural milieux. The two poles of this factor appear to represent a dimension of involvement in the target culture, varying from identification to distant interest. Supporting this interpretation is the fact that, unlike the first three factors, not all groups are represented on this factor: the two groups of anglophone students in a unicultural milieu do not contribute significant loadings. These two groups have less immediate contact with their respective target groups than do the other groups, with less chance to become involved in the second culture. For these reasons, this dimension has been labeled a *Familiarity/Involvement* factor.

Factor V receives substantial loadings from seven groups, and borderline loadings from the eighth. All of the orientations contributing to this factor are concerned with studying in order to gain more knowledge (variables 25, 9, 22, 32, 1, 48, and 40). As well, borderline loadings contributed by Group 3 are know-

ledge and friendship orientations (variables 15 and 18). The aspect of these orientations that varies from group to group is the degree of affect expressed toward members of the target group in the knowledge acquisition process: from very little (variable 40) to a relatively large degree of affect (variable 1). The common element in these orientations is the acquisition of knowledge; this factor has thus been labeled a *General Knowledge* factor.

Factor VI is made up of four orientations, all of which are concerned with learning a language in order to gain prestige or respect from others (variables 45, 12, 29, and 4). The four groups represented on this factor (Groups 8, 2, 5, and 1) each appear to bear the same dominance relationship to their respective target groups: that of a relatively dominant ethnolinguistic group learning the language of a visible but relatively subordinate group's language. In unicultural milieux, this relationship is portrayed in the learning of French or English by the dominant anglophone or francophone group, respectively. In the multicultural milieux, the relationship is represented by the relatively dominant anglophone group in Ottawa learning French and, for the francophone group, the learning of Spanish (the language of a relatively subordinate group) rather than English. Given the dominance and the prestige-seeking aspects of this factor, it has been called *Dominance/Recognition*.

Factor VII (Table 13) receives appreciable loadings from four variables contributed by three anglophone groups: both groups from multicultural milieux and the anglophone group learning Spanish in a unicultural milieu. Three of the variables are influence-seeking orientations to second language learning (variables 10, 20, and 13), while the fourth, with a negative loading, is an instrumental orientation (variable 17). The factor appears to represent a control continuum with one pole, the instrumental orientation, representing an interest in pragmatic gains and the opposite pole linked to social influence and dominance. The factor also appears to be linked to anglophone groups and has been labeled an *Anglophone Influence* factor.

Factor VIII receives its two highest loadings from the social and cultural orientations in the two groups of francophones studying in a multicultural milieu (variables 33 and 46). The factor also receives appreciable loadings from the two groups studying Spanish in unicultural milieux: the francophone group contributing an influence/identification orientation (variable 45) and the anglophone group, a knowledge orientation (variable 15). The common component of these orientations is an interest in the way of life and the artistic production of the second language community, coupled with prestige- and influence-seeking. This dimension has been labeled a *Social/Cultural* factor, indicating that an orientation for students in these groups is to gain social esteem through participating in the cultural activities of the second group.

Factor IX receives appreciable loadings from two school instrumental orientations (variables 6 and 36) from the anglophones (unicultural milieu) and francophones (multicultural milieu) learning official languages. This factor can probably be attributed to similarities in the school requirements for the two groups, with French being a difficult course to drop for students in the former group and English a compulsory subject for those in the latter group. This factor has thus been labeled *School Instrumental*.

Summary of inter-group factor analysis. To a large extent, the factor analysis of the inter-group correlation matrix confirmed the similar interpretations given to many of the factors in the eight individual analyses: three or four of the six factors in each group proved to be common to all groups and were called, in the inter-group analysis, *General Instrumental, General Travel, General Friendship,* and *General Knowledge* (Factors I, II, III, and V in Table 13). Three of the remaining five factors in the inter-group analysis (Factors IV, VII, and VIII) appeared to be determined, in part, by the elements of the learning context considered in the present study. Factors VII and VIII, the *Anglophone Influence* and *Social/Cultural* factors, appeared to result directly from these contextual elements. Ethnolinguistic group membership appeared to be the major contextual element determining the *Anglophone Influence* factor, which received its name because three of the four anglophone groups were the only groups that contributed significant loadings to the factor. The major components of this factor are influence orientations (see Table 13), which appear to be peculiar to the anglophone groups. When influence emerged as a factor for francophones, it was associated with the desire to identify with members of the target language group (variable 39 in Table 13). Factor VIII, *Social/Cultural*, received appreciable loadings from groups representing combinations of the three contextual elements--from francophones in multicultural milieux and, in unicultural milieux, from students learning a minority language.

Factors IV and VI appear to be determined by two elements of the learning context that are not precisely contiguous to those considered in the present study: the dominance relationship between the first and second ethnolinguistic groups, and the contact available between members of the two groups. The dominance relationship appeared to be important in determining the *Dominance/Recognition* factor (Factor VI), with members of relatively dominant groups learning the language of subordinate groups in order to achieve respect from others. The definition of the dominance relationship used in interpreting this factor refers to the relationship between ethnolinguistic groups at the local level rather than to the continent-wide anglophone-francophone relationship considered in the ethnolinguistic group membership factor.

A similar situation existed for the *Familiarity/Involvement* factor, Factor IV, which appeared to be determined by the

degree of contact available between the first and second language groups. Factor IV received appreciable loadings from all groups except the two groups of anglophones studying in a unicultural milieu, possibly because these two groups have little contact with representatives of their respective target groups relative to the other six groups. A factor expressing the degree of involvement with the target group might thus be irrelevant for these groups and, more generally, other groups who have little or no immediate contact with the target culture.

The ninth factor, *School Instrumental*, appeared to result from specific academic requirements of the students sampled. Finally, one orientation amongst the 48, the *Distant Interest* orientation for francophones learning a minority language in a unicultural milieu (Group 7, variable 42 in Table 13), did not load substantially on any of the factors, correlating highest with the *Anglophone Influence* factor.

Individual Group Predictions of Motivation

After delineating and comparing orientations in the eight groups, the next analyses were conducted in order to describe the role played by orientations in motivating the student to learn a second language, to determine for each group which combination of orientations best predicted motivation. Motivation was measured by summing together the Motivational Intensity and Desire to Learn scales; orientations were measured using the factor scores calculated from the individual groups factor score coefficient matrices. Motivation was regressed on the orientation variables using a forward stepping procedure whereby the first independent variable chosen to enter the equation was the one correlating highest with motivation. In each of the subsequent steps, that variable was entered which, in conjunction with the variables already in the equation, most increased the multiple $\underline{R}^2$.

Table 14 presents the results of these analyses for each group. Because the regression procedure was stopped when the increase in $\underline{R}^2$ would have been insignificant at an level of .05, all of the ß coefficients in all equations in this table are significant at $\underline{p} < .05$. Also, because the independent variables in each equation were six uncorrelated factor scores, the increase in $\underline{R}^2$ contributed by a variable was equal to the variance accounted for by that variable independent of the remaining variables. Table 14 indicates that, in all of the groups, orientations are significantly correlated with motivation, with a minimum multiple $\underline{R}$ of .29 in Group 8 (francophones studying a minority language in a multicultural milieu) to a maximum of .83 in Group 4 (anglophones learning a minority language in a multicultural milieu). Considering all eight groups together, 28 of the 48 orientations contribute significantly to multiple correlations. All but eight of these were

shown in the inter-group factor analysis to be general orientations, that is, represented in each group. In all cases, a general orientation was the most important predictor of motivation.

Table 14 suggests that orientations and motivation are related differently in anglophone and francophone groups. The four anglophone groups, followed by the two francophone groups in unicultural milieux, have the highest multiple correlations. Parallel to this, the number of orientations contributing

Table 14

Multiple Regressions Predicting Motivation from Orientations

Step	Orientation entered*	R	R^2	R^2 change	β°
	Group 1: Anglophones learn official language, unicultural				
1	III.Travel*	.50	.25	.25	.42
2	I.Understanding/Identification*	.65	.40	.15	.39
3	II.Instrumental*	.71	.49	.09	.30
4	V.Friendship*	.75	.54	.05	.21
5	IV.Prestige	.76	.57	.03	.18
	Group 2: Anglophones learn official language, multicultural				
1	I.Friendship/Travel*	.60	.36	.36	.56
2	III.Knowledge/Identification*	.66	.44	.08	.29
3	V.Knowledge	.67	.47	.03	.18
	Group 3: Anglophones learn minority language, unicultural				
1	II.Instrumental*	.43	.18	.18	.40
2	IV.Travel*	.59	.34	.16	.38
3	VI.Friendship/Understanding*	.69	.46	.12	.34
4	I.Influence	.71	.49	.03	.16
5	V.Instrumental(advancement)	.72	.50	.02	.15
	Group 4: Anglophones learn minority language, multicultural				
1	I.Instrumental*	.63	.39	.39	.56
2	III.Friendship*	.70	.49	.10	.30
3	IV.Knowledge/Identification*	.76	.57	.08	.27
4	VI.Knowledge	.80	.63	.06	.25
5	V.Travel*	.83	.68	.05	.23
	Group 5: Francophones learn official language, unicultural				
1	II.Friendship*	.49	.24	.24	.43
2	IV.Travel*	.60	.35	.11	.35
3	V.Prestige	.62	.38	.03	-.18
4	I.Knowledge/Respect*	.64	.41	.03	.17
	Group 6: Francophones learn official language, multicultural				
1	V.Career Instrumental*	.27	.07	.07	.26
2	IV.Identification/Travel	.35	.12	.05	.20
	Group 7: Francophones learn minority language, unicultural				
1	I.Travel/Friendship*	.48	.23	.23	.48
2	V.Intellectual	.57	.33	.10	.33
3	II.Instrumental*	.64	.41	.08	.28
	Group 8: Francophones learn minority language, multicultural				
1	I.Travel/Friendship*	.29	.08	.08	.29

*Denotes orientations loading on General Factors (I, II, III, or V in Table 13). Roman numerals are factor numbers shown in Tables 5 to 12. °All β s significant at $p < .05$.

significantly to the multiple correlations varies from a high of five in three out of the four anglophones groups to lows of one and two in francophone Groups 6 and 8. Also, an ethnolinguistic group by target language interaction pattern appears to emerge in the anglophone groups, determining which of the orientations most influences motivation. Thus, for the anglophone groups, travel orientations are most highly correlated with motivation for the official language learners and instrumental orientations for the minority language learners. No similar pattern exists for the francophone students. Here, orientations with affective components are most highly correlated with motivation in three of the four groups and, for the group learning English in a multicultural milieu, the instrumental orientation is the most important predictor of motivation.

To summarize the results from the multiple regression analyses, orientations shown earlier to be common to all groups were the most important determinants of motivation. In addition, there appeared to be some important differences between anglophone and francophone groups, with orientations in the former groups being better predictors of motivation than in the latter groups. However, because the eight analyses were carried out independently, these comparisons are inexact. For this reason, a similar set of analyses, using causal modeling, was conducted which did allow direct comparisons between regression equations. In order to make these comparisons, it was necessary to include in the analyses only the orientations common to all groups and to develop measures of these orientations which could be used in cross-group comparisons. The fact that the multiple regressions pointed to the general orientations as the most important predictors of motivation in all groups justified using only the four general measures in the causal modeling analysis.

Item Analyses

The four general orientations were used both for the causal modeling analysis and for the MANOVA analysis investigating the level of endorsement of orientations as a function of the learning context. Before these analyses could be done, however, it was necessary to develop measures of the orientations that could be compared between groups. Internal reliability-consistency analyses, using Cronbach's α coefficient (Cronbach, 1951), were completed to select items that would serve as measures of each of the orientations. To insure that the measures would be the same across all eight groups, the item analyses were done on the combined data from all of the groups (N = 813). Once a satisfactory solution was found for the total sample, it was tested in each of the eight groups to verify that the scale was internally consistant within each group.

At the start of each analysis for a particular orientation, a large number of items were considered by including any

item that loaded at a borderline or higher level (absolute value of the loading greater than .30) in two or more groups. Item analyses were then performed in order to reduce the number of items defining a particular orientation and to produce a scale with high internal consistency. Those items were eliminated which did not evince high correlations with the total score (the sum of the remaining items) for the scale.

Tables 15 to 18 present the item-total correlations for each of the four general orientations at the initial and final stages of analysis; all of the possible items are included in the initial stage while only those items chosen to measure the orientation are shown at the final stage. Table 15 shows the analyses for the *General Instrumental* factor (Factor I in Table 13), indicating that nine of the original 11 variables were retained to serve as measures of this orientation. The Cronbach α for the final measure is .87. Tables 16 and 17 give the results for the *General Travel* and *General Friendship* factors, respectively (Factors II and III in Table 13). Many items loaded highly on both of these factors in the individual group factor

Table 15

Item-total Correlations for Initial and Final Versions of the Instrumental orientation Scale

Item*	Correlations	
	Initial	Final
3.Be admitted to a higher school	.54	.55
4.Useful in getting a good job	.69	.69
6.Need it for future career	.68	.69
11.Become more knowledgeable	.26	
14.To get a degree	.61	.64
18.To be successful in business	.69	.64
19.Be useful after I leave school	.69	.66
22.Get a job where use L2	.41	.38
29.To finish high school	.46	.49
30.Help get a better paying job	.60	.61
33.Meet more and varied people	.34	

*"L2" indicates second language or second language group.

analyses (Tables 5 to 12) and, in the inter-group factor analysis, Travel/Friendship orientations in Groups 6, 7, and 8 loaded highly on both of these general factors (Table 13). In order that the scales measuring these orientations include different items, a criterion in addition to the item analysis criteria was used to select the items for these two orientations. Items showing high item-total correlations on both scales were assigned to that scale for which they had the highest absolute loadings in the individual factor analyses. Tables 16 and 17 show that four variables were selected from the original

Table 16

Item-total Correlations for Initial and Final Versions of the Travel Orientation Scale

Item*	Correlations	
	Initial	Final
1.Be at ease with L2 Canadians	.37	
5.Travel (Canada, Mexico)	.52	.59
7.Become member of L2 community	.29	
8.Study another language later	.43	
10.Travel (France, U.S., Spain)	.50	.64
11.Become more knowledgeable	.47	
12.To meet some L2 people	.65	
16.Make friends with L2 people	.65	
19.Be useful after I leave school	.41	
21.Help if I should ever travel	.55	.54
22.Get a job where use L2	.54	
23.Gain friends among L2 speakers	.53	
25.Get to know L2 speakers	.61	
27.Participate in activities	.49	
28.Acquire ideas, broaden outlook	.53	
33.Meet more and varied people	.54	
36.Travel to an L2 area	.57	.69
37.Understand L2 art	.44	

*"L2" indicates second language or second language group.

lists to measure each of these general orientations. The α coefficients for the final *General Travel* and *General Friendship* scales are .81 and .79, respectively. Table 18 shows the results for the internal consistency analyses for the *General Knowledge* factor (Factor V in Table 13). Nine of the original 18 items were selected, with an α coefficient of .81.

Table 17

Item-total Correlations for Initial and Final Versions of the Friendship Orientation Scale

Item*	Correlations	
	Initial	Final
1.Be at ease with L2 Canadians	.53	
2.Find out how L2 people live	.53	
5.Travel (Canada, Mexico)	.61	
7.Become member of L2 community	-.18	
8.Study another language later	.55	
9.Help understand L2 life	.59	
10.Travel (France, U.S., Spain)	.59	
11.Become more knowledgeable	.62	
12.To meet some L2 people	.72	.64
16.Make friends with L2 people	.67	.69
21.Help if I should ever travel	.69	
22.Get a job where use L2	.46	
23.Gain friends among L2 speakers	.59	.56
25.Get to know L2 speakers	.68	.61
27.Participate in activities	.46	
28.Acquire ideas, broaden outlook	.65	
33.Meet more and varied people	.66	
36.Travel to an L2 area	.69	
37.Understand L2 art	.55	

*"L2" indicates second language or second language group.

Table 18

Item-total Correlations for Initial and Final Versions of the Knowledge Orientation Scale

Item*	Correlations	
	Initial	Final
1.Be at ease with L2 Canadians	.28	
2.Find out how L2 people live	.51	.56
7.Become member of L2 community	.35	
8.Study another language later	.41	
9.Help understand L2 life	.58	.59
11.Become more knowledgeable	.51	.48
12.To meet some L2 people	.55	
13.Appreciate problems L2 minority	.47	.46
15.Understand own language better	.43	.45
17.Make me appear more cultured	.44	
23.Gain friends among L2 speakers	.48	
25.Get to know L2 speakers	.63	
26.Influence in my community	.41	
27.Participate in activities	.52	.43
28.Acquire ideas, broaden outlook	.57	.58
31.Help learn about myself	.57	.54
35.Think and behave like L2 people	.42	
37.Understand L2 art	.51	.48

*"L2" indicates second language or second language group.

Finally, Table 19 contains the α coefficients for the final version of each of the four general orientation measures within each of the groups, as well as the median coefficient for each of the measures. Each of the scales evidences at least adequate internal reliability (minimum α of about .70) in all groups. The coefficients vary from a minimum of .72 to a maximum of .91, with a median of .86, for the *General Instrumental* orientation (see Table 19). Minima, maxima, and medians for the

other three measures are .69, .86, and .74 for the *General Travel* orientation, .70, .85, and .82 for *General Friendship*, and .67, .82, and .80 for *General Knowledge*.

Table 19

Internal Consistency Coefficients (Cronbach α) for General Orientation Scales

	Orientation			
Group	Instrumental	Travel	Friendship	Knowledge
1	.80	.79	.81	.81
2	.86	.77	.70	.81
3	.85	.75	.85	.78
4	.90	.86	.84	.82
5	.72	.77	.76	.78
6	.72	.74	.78	.67
7	.91	.69	.83	.79
8	.80	.81	.83	.81
Median	.86	.77	.82	.80

Although the item analyses were begun with a large number of variables for each of the scales, the resulting measures include those items that load highest on their respective factors in the most groups in the eight individual factor analyses presented in Tables 5 to 12. A subject's score for an orientation was calculated as the average of the subject's responses to the items composing that orientation scale, prorating for unanswered items. These scores were used as measures of the common orientations in the remaining two analyses, which evaluated orientations as a function of the learning context.

Generalized Model of the Prediction of Motivation

The multiple regression analyses evaluated the relationships between orientations and motivation within each of the eight groups. These analyses were limited in that formal comparisons of the equations were not made. This precluded determining if one equation might adequately describe two or

more (up to all eight) groups rather than the eight regression equations actually computed. For this reason, structural equation modeling was next used to construct a model predicting motivation from the four general orientations and to test the generalizability of that model to the eight groups. The model investigated is presented in Figure 1, which shows motivation to be a function of the four inter-correlated general orientations. Figure 2 is a partial reproduction of Figure 1, showing only those paths that were tested for generality between groups--the four orientation-Motivation paths. The remaining paths (orientation covariances and Motivation-observed variable paths) were allowed to vary between groups in the following analyses.

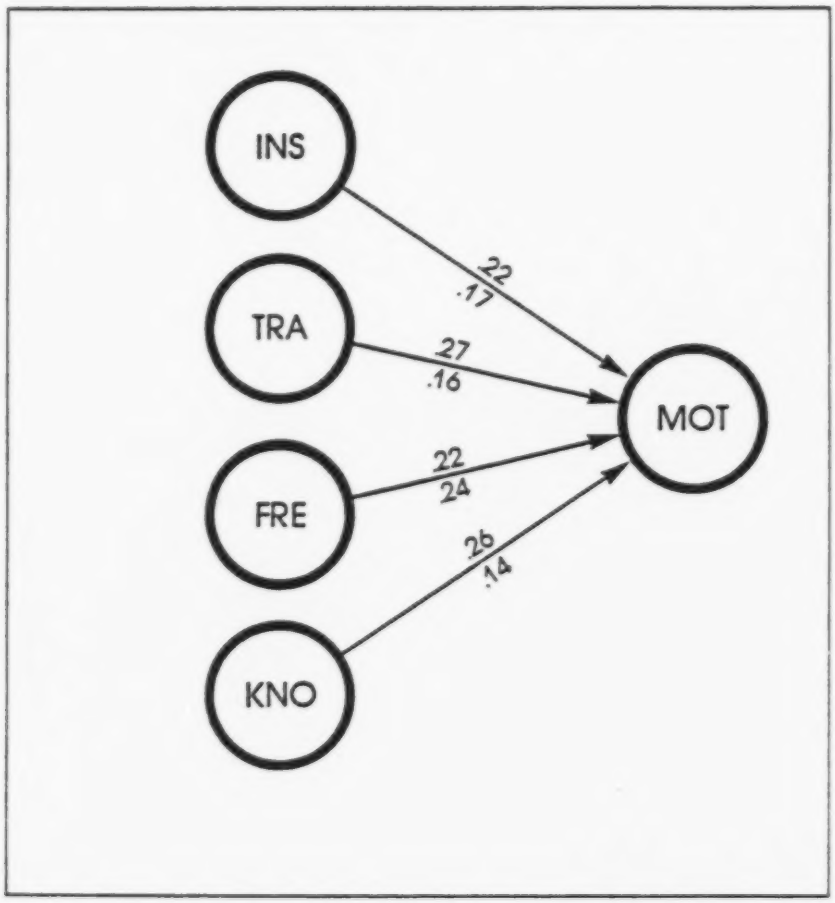

Figure 2. Parameter estimates for the Ethnolinguistic Group solution predicting Motivation (MOT) from Instrumental (INS), Travel (TRA), Friendship (FRE), and Knowledge (KNO) orientations. (Estimates for anglophones are shown above the paths; francophones below.)

LISREL V (Jöreskog and Sörbom, 1981) was used to estimate the parameters of the model shown in Figures 1 and 2, and to determine what set (or sets) of parameter estimates for the orientation-Motivation paths could be said to represent all groups (or subsets of the groups). First, however, it was necessary to establish a common metric for the variables in the analysis in order to more readily compare coefficients estimated for different groups. Jöreskog (1971; McGaw and Jöreskog, 1971) recommends rescaling the variance-covariance matrices for each group so that the average of the matrices, weighted for group size, is a correlation matrix. These matrices are given in Tables B-11 to B-18 of Appendix B. Due to the standardization procedure, the mean variance for each variable across the eight groups is 1.00.

The least general solution was first computed by deriving eight independent sets of parameters, one set for each group. The χ^2 measure of goodness of fit for this solution, as well as the measure for each of the groups, was then examined to determine if the model adequately described the data. This solution, called the *Independent Groups* solution, was then used to evaluate whether or not more general solutions adequately represented the data.

Table 20 indicates that neither the χ^2 for the Independent Groups solution ("Total" in Table 20) nor those for the individual groups, evaluated at the appropriate degrees of freedom,

Table 20

Goodness of Fit Statistics for the LISREL Solutions for Eight Independent Groups

Group	χ^2	df	n
1	3.0	3	151
2	3.7	3	98
3	3.1	3	97
4	2.6	3	75
5	3.1	3	110
6	4.6	3	136
7	2.8	3	65
8	3.3	3	81
Total	26.2	24	813

are significant. This indicates a good fit between the model and the data in all eight groups. The parameter estimates for each of the equations are shown in Table B-19 of Appendix B. At least one of the parameter estimates representing the paths between orientations and Motivation is significant in each of the groups, indicating a significant relationship between at least one orientation and Motivation in each group.

The χ^2 statistics shown in Table 20 indicate that the model depicting Motivation to be a function of orientations is representative of the data in each of the groups. This is similar to the results already found in the multiple regression analyses. The next step was to determine if the relationships between orientations and motivation represented in this model could be considered to apply generally to all of the groups or to subsets of the groups. The next analysis compared the Independent Groups solution to the most general solution where the parameter estimates for the paths linking orientations to Motivation were constrained to be equal in all eight groups. Table 21 shows the χ^2 statistics for this latter *Global* solution and reproduces those for the Independent Groups solution. Table 21 also presents the differences between the degrees of freedom and the χ^2 s of the two solutions. The difference χ^2 is significant, indicating that the goodness of fit of the Global solution is significantly poorer than that of the Independent Groups solution.

Table 21

Goodness of Fit Statistics for all LISREL Solutions

				Difference	
Solution	Parameter Sets	df	χ^2	df	χ^2
Independent Groups	8	24	26.2		
Global	1	52	92.9*	28	66.8*
Ethnolinguistic Group	2	48	63.3	24	37.1
Target Language	2	48	86.9*	24	60.7*
Milieu	2	48	75.5*	24	49.3*

$p < .01$, $N = 813$

In the next step, two sets of parameters were estimated simultaneously for the eight groups, subdividing the groups according to one of the three factors considered in the present study--Ethnolinguistic Group, Target Language, or Milieu. Thus, for example, parameters were estimated separately for the four anglophone and four francophone groups when considering the factor Ethnolinguistic Group. The χ^2 statistics for these three solutions are shown in Table 21, as well as the difference χ^2 statistics relative to the Independent Groups solution. Table 21 indicates that the difference χ^2 statistics are significant for the Target Language and Milieu solutions but not for the Ethnolinguistic Group solution. Significant information is lost when parameters are estimated for the eight groups divided according to language of study or to the cultural composition of the milieu, but not according to the ethnolinguistic group of the student. This indicates that the Ethnolinguistic Group and Independent Groups solutions do not differ significantly and that the more general Ethnolinguistic Group solution can be used to describe the parameters of the model shown in Figure 2. Further analyses could have examined sets of parameter estimates for groups paired according to interactions of the factors, that is, four sets of parameters. However, this was not necessary because the most general solution was sought, the one that most parsimoniously and adequately represented the data. Four sets of parameter estimates would be a less parsimonious solution than the two that have been described.

It can be concluded that the path coefficients representing the relations between each orientation and motivation are the same within the anglophone and within the francophone groups. The coefficients estimated for the Ethnolinguistic Group solution are shown in Figure 2 for the anglophone and francophone groups. All other parameter estimates for this solution (which are different for each group), as well as those shown in Figure 2, are presented in Appendix B, Table B-20. While all the coefficients for the orientation-Motivation paths shown in Figure 2 are significant for both sets of groups, those for the anglophones are generally higher than those for the francophones, indicating that orientations have a greater degree of influence on motivation in the anglophone group. For francophones, the friendship orientation is most highly correlated with Motivation.

Motivation and orientations: Summary. As with the earlier inter-group factor analysis, the inter-group analysis of motivation and orientations confirmed inferences made from the results of the analyses on the individual groups. First, a model positing motivation to be a function of orientations was supported in each of the groups. Second, orientations appear to be, in general, more highly related to motivation in the anglophone than in the francophone groups. An exception to this is the friendship orientation which appears to play a more important role for the francophones than do the three other orientations. This is evidenced in the multiple regression

analyses where orientations with affective components were highly related to motivation for three of the francophone groups (see Table 14). It is also evidenced in the LISREL analysis where the regression coefficient for the friendship orientation is higher than that for the other orientations (see Figure 2).

The LISREL analyses, in addition to substantiating the results of the multiple regression analyses, added information to them. All path coefficients for orientation-Motivation relationships were significant in the Ethnolinguistic Group solution for both anglophones and francophones in Figure 2. This indicates that a model depicting motivation to be a function of all four of the common orientations was supported by the data. Thus, it can be concluded that the strength of a student's motivation to learn a second language is determined, in part, by the strength of each of the goals represented by the orientations: career and school advancement, and the desires to travel, seek out friendships, and seek knowledge.

Second, the LISREL analyses demonstrated that a student's ethnolinguistic group membership, but not the socio-political status of the language being learned or the cultural diversity of the learning environment, determines the strength of the relationship between orientations and motivation. The Target Language and Milieu factors did not have consistent effects on the orientation-Motivation relations across the groups, while Ethnolinguistic Group did. Except for seeking friendships with members of the target group, a student's goals appear to exert a greater influence on the motivation to learn a language among anglophones than among francophones.

Student Endorsements of Orientations

Multivariate analysis of variance was used to study student endorsements of the four common orientations as a function of learning context. The four orientations--the response variables--were predicted from a 2 x 2 x 2 factorial design with Ethnolinguistic Group (anglophone or francophone), Target Language (official or minority), and Milieu (unicultural or multicultural) as the dichotomous factors. The number of subjects per group was limited to 65--determined by the smallest group (Group 8)--by randomly eliminating subjects from the seven other groups in order to have an exact least squares solution. Significant MANOVA main and interactive effects were investigated using discriminant function analysis procedures (including examination of standardized discriminant function coefficients and canonical structure coefficients as well as comparisons of group centroids) and protected F procedures.

The results of the 2 x 2 x 2 MANOVA predicting the four orientations are presented in Table 22, which shows the Wilks's λ and associated F ratio approximation for each of the main

and interactive effects. Table 22 reveals that all main effects and the Target Language by Milieu interaction effect are significant. The remaining two-way and three-way interactions are not significant.

Table 22

Multivariate Analysis of Variance of Four Orientations by Ethnolinguistic Group, Target Language, and Milieu

Source	Wilks's λ	F
Ethnolinguistic Group (E)	.925	10.3*
Target Language (T)	.602	84.1*
Milieu (M)	.894	15.0*
E x T	.980	2.6
E x M	.975	3.3
T x M	.925	10.3*
E x T x M	.985	1.9

*$p < .001$; $df = 4,509$

Table 23 presents the follow-up standardized discriminant function coefficients, the canonical variate correlations, and the univariate F statistics for the four response variables for the significant Ethnolinguistic Group effect of Table 22. Examination of Table 23 reveals that knowledge is the sole orientation differing significantly between anglophone and francophone students. The univariate F ratio for knowledge is highly significant and is the only significant univariate ANOVA. This indicates that anglophone and francophone groups differed significantly only on their ratings of the importance of the knowledge orientation. The discriminant function coefficient and canonical variate correlation for knowledge are much higher than the corresponding coefficients for the other orientations, indicating that no other orientation contributes substantially to the overall MANOVA effect. The three statistics thus indicate that the significant MANOVA effect for the Ethnolinguistic Group factor can be reduced to the ANOVA effect for knowledge. The significant MANOVA effect is caused by the anglophones tending to more highly endorse the knowledge orientation than the francophones (Means are 4.1 and 3.7, respectively).

Table 23

Follow-up Analyses for the MANOVA Ethnolinguistic Group Main Effect

Orientation	Discriminant coefficient	Canonical correlation	Univariate F
Instrumental	-0.36	-.17	1.1
Travel	-0.34	-.19	1.5
Friendship	-0.30	.04	0.1
Knowledge	1.17	.76	23.7*

*$p < .001$; $df = 1,512$

Table 24 presents the results of the follow-up analyses for the significant MANOVA main effect of Target Language. Examining Table 24, it appears that three of the four orientations are important in the contrast between the learning of official and minority languages: the instrumental, travel, and knowledge orientations. These three are approximately equally correlated with the discriminant variate and are approximately equally weighted in the discriminant functions. The correlation and discriminant function coefficients are considerably lower

Table 24

Follow-up Analyses for the MANOVA Target Language Main Effect

Orientation	Discriminant coefficient	Canonical correlation	Univariate F
Instrumental	0.85	.48	78.2*
Travel	-0.64	-.49	81.1*
Friendship	0.21	-.24	19.9*
Knowledge	-0.66	-.50	82.9*

*$p < .001$; $df = 1,512$

for friendship, indicating that this response variable does not contribute substantially to the separation of the groups. While all four univariate ANOVAs are significant, the one for friendship is much lower than the others.

The discriminant function and univariate F results of Table 24 would suggest that the significant Target Language MANOVA effect is caused by the official and minority language groups being significantly separated along a dimension defined by the instrumental orientation at the positive pole and by the travel and knowledge orientations at the negative pole. The significant MANOVA effect indicates that students learning an official language tended to rate higher on this dimension than did students learning a minority language (multivariate centroids are -1.13 and -2.74, respectively). That is, relative to the minority language learners, the official language group tended to rate instrumental reasons as more important and travel and knowledge orientations as less important.

Table 25 presents the follow-up analyses for the significant Milieu effect of Table 22. Table 25 shows that, although the travel orientation has the largest standardized discriminant function coefficient, it has the smallest correlation with the discriminant variate and the smallest univariate F ratio. This suggests that travel is highly correlated with the other response variables when the subjects are grouped according to milieu, and does not discriminate between the groups independent of the other variables. The canonical variate correlations and the univariate F ratios for the Milieu effect (see Table 25) suggest that the unicultural and multicultural groups differ on a dimension defined by the friendship and knowledge orientations and, to a lesser extent, by the instrumental orientation. The

Table 25

Follow-up Analyses for the MANOVA Milieu Main Effect

Orientation	Discriminant coefficient	Canonical correlation	Univariate F
Instrumental	-0.32	-.36	8.0*
Travel	0.95	.28	4.7
Friendship	-0.80	-.56	18.7**
Knowledge	-0.33	-.55	16.5**

*$p < .01$; $df = 1,512$
**$p < .001$; $df = 1,512$

significant MANOVA effect for the Milieu factor (Table 22) indicates that students in the multicultural milieu rated the knowledge/friendship reasons for learning a second language higher than did those from the unicultural milieu.

The main effects of Target Language and Milieu are superceded by the significant Target Language by Milieu interaction shown in Table 22. Table 26, which presents the follow-up analyses for this interaction, clearly indicates that the four groups represented by this effect differ along a continuum defined by the instrumental orientation at one pole and the travel orientation at the opposite pole. These variables have large discriminant function coefficients and canonical variate correlations relative to the friendship and knowledge variables, and significant univariate F ratios.

Table 26

Follow-up Analyses for the MANOVA Target Language Milieu Interaction

Orientation	Discriminant coefficient	Canonical correlation	Univariate F
Instrumental	-0.74	-.51	10.9*
Travel	1.04	.58	13.7*
Friendship	-0.41	-.06	0.1
Knowledge	0.03	-.06	0.2

*$p < .001$; $df = 1,512$

Figure 3 presents a graph of the multivariate group centroids on the instrumental/travel dimension as a function of Target Language and Milieu. Figure 3 indicates that the two groups of minority language learners (in both the unicultural and multicultural milieux) cluster together on this dimension while the two groups of majority language learners do not. It appears from Figure 3 that, relative to learners of an official language, minority language learners stress travel reasons for learning a second language while depreciating instrumental reasons. This was also evidenced by the significant main effect of Target Language (see Table 24). However, the interaction effect appears to be caused by the difference between the two groups of official language learners with the group from the multicultural milieu giving equal importance to the travel and

instrumental orientations and the group from the unicultural milieu stressing the instrumental orientation. Tests of the significance of the differences between group centroids using Hotelling's T^2 statistic substantiate these observations. Except for the unicultural and multicultural minority learners, all pairs of centroids shown in Figure 3, including those for the unicultural and multicultural official language learners, differ significantly (see Table B-21 in Appendix B).

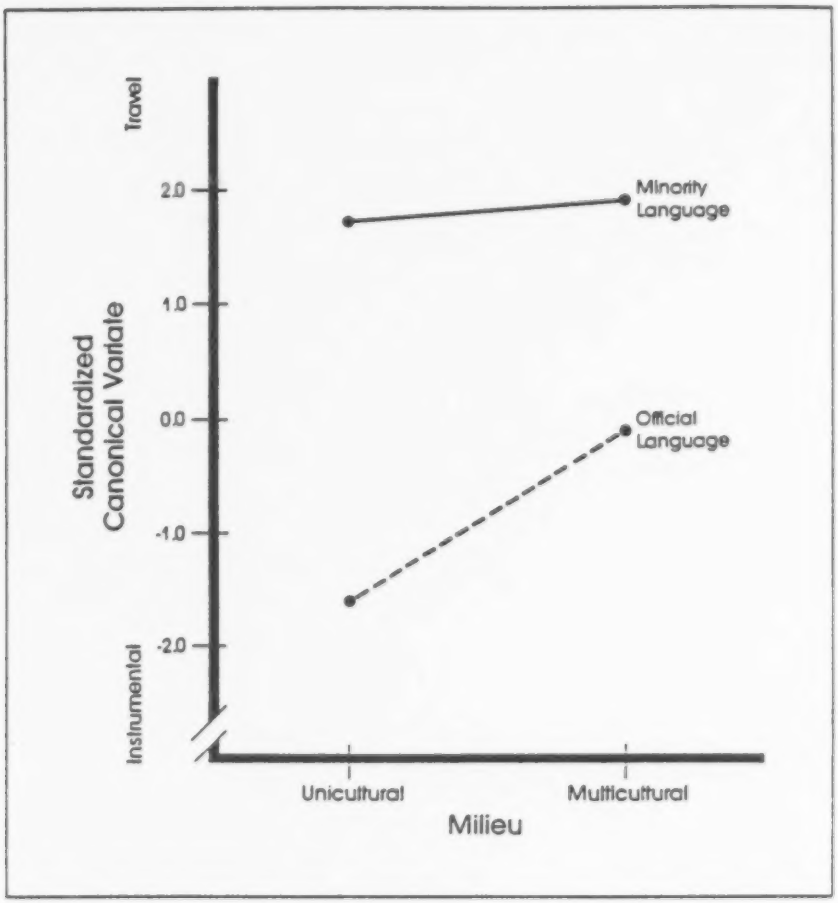

Figure 3. Multivariate group centroids on the Instrumental/Travel variate as a function of Target Language and Milieu.

Summary of MANOVA analysis. The MANOVA analysis suggests that three of the four orientations were differentially endorsed by the eight groups of students. Only the friendship orientation appeared to be of little importance in this analysis. The significant Ethnolinguistic Group effect indicated that anglo-

phones tended to endorse the acquisition of knowledge as an orientation more highly than did the francophones. The instrumental and travel orientations defined opposite poles of a dimension which differentiated groups according to the Target Language by Milieu interaction. Groups learning a minority language tended to endorse the travel orientation highly and depreciate the importance of the instrumental orientation relative to the official language learners. Taken as a group, the official language learners tended to perform opposite to this, giving high endorsements to the instrumental orientation and low to the travel orientation. However, the interaction was caused by the differences between the two groups of official language learners on the instrumental/travel dimension, with the group from the multicultural milieu located closer to the travel end of this dimension than was the group from the unicultural milieu.

DISCUSSION

There has recently been much disagreement about the importance and the role of affective variables, including orientations, in second language learning (see Gardner, 1980; Gardner and Gliksman, 1982; Oller, 1978, 1981a, 1981b, 1982). In the present study, aspects of this conflict were traced to two sets of problems: conceptual problems, concerning the definition of orientations and their relationship to motivation, and contextual problems, concerning the composition of orientations and their importance to second language learning as a function of socio-cultural factors in the environment. These problems were examined by defining orientations empirically as sets of inter-related reasons given for studying a language, and by examining the role of the learning context in determining their composition and importance. Three aspects of the learning context were considered: ethnolinguistic group membership, the status of the language of study, and the cultural diversity of the milieu. The importance of orientations was evaluated as a function of their effect on students' motivation to learn a language, and as a function of their level of endorsement by students in the various contexts. Because of their role in the conflict, the integrative orientation--defined as learning a language in order to identify with valued members of the second language community--and the instrumental orientation--learning in order to further personal career or school goals--were of particular interest in the present study. The results revealed the existence of four general orientations to second language learning but, at the same time, demonstrated the effect of the learning context on the composition of orientations and on their role in the motivational process.

General Orientations

Perhaps the most important findings of the present study concern the lack of evidence of the existence of a general integrative orientation coupled with the presence of four other general orientations, including an instrumental orientation. It was expected that the integrative orientation would be present in all groups and that it would play a more important role in language learning for relatively dominant groups learning a subordinate or minority language (for anglophones learning French of for anglophones and francophones learning Spanish) than for other groups. The results showed, however, that this orientation did not exist in most groups studied. Liberal interpretations of the individual group factor analyses suggested that this orientation might exist, in conjunction with other reasons for learning a language, in three groups: as part of a friendship orientation for anglophones learning a minority language in a multicultural milieu (Group 4), as part of an understanding/identification orientation for anglophones learning an official language in a unicultural milieu (Group 1), and as part of an integrative/influence orientation for francophones studying a minority language in a multicultural milieu (Group 8). Each of these groups is an example of a relatively dominant group learning a relatively subordinate language, but many groups fitting this pattern are not included (Groups 2, 3, and 7 are missing). Thus, it cannot be said that the presence of the integrative orientation, as part of other orientations, is due to a conjunction of contextual factors considered in the present study. Nor do the associated orientations in each group--friendship, understanding/identification, and influence--suggest that the integrative orientation might generally exist in conjunction with another reason for learning. Instead, the results of the present study question the importance and, indeed, the existence of an integrative orientation to language study. The inclusion of a measure of the integrative orientation along with measures of attitudes and motivation in the assessment of an integrative motivation or integrativeness (e.g., Clément, 1980; Gardner, 1981; Gardner and Lambert, 1972; Gliksman, Gardner, and Smythe, 1982) must, therefore, also be questioned.

An instrumental orientation, on the other hand, was shown to exist in each of the learning contexts, and the intergroup factor analysis indicated that the instrumental orientation was similarly composed in each of the contexts. However, the definition of this orientation was more restricted than the "grab-bag" of reasons called instrumental by Gardner, et al. (1974, p. 7-11). Gardner has defined the instrumental orientation as any "non-interpersonal" reason for learning a language. These include, in addition to career and school advancement, the seeking of respect and general knowledge (see Gardner, et al., 1979). The present study showed that these reasons for learning represent separate orientations in many groups, and that a

general instrumental orientation exists which consists of only career and school advancement motives for learning.

In addition to the instrumental orientation, travel, friendship, and knowledge orientations were found to be common to all groups, existing across all combinations of socio-cultural factors considered in the present study. The item analyses used to develop measures of these three general orientations showed that, while the orientations in each of the groups may be composed of a variety of reasons for learning a language, each orientation was basically defined by a cluster of similar reasons that was invariant across the groups. Thus, the general travel orientation expressed the goal of learning a second language in order to travel to areas where the language was spoken; the general friendship orientation expressed students' desire to meet and become friends with members of the target group; and the general knowledge orientation (at face value, the most heterogeneous of the general orientations) expressed the wish to acquire more knowledge, especially about oneself and about the target group's way of life and culture.

While integration, strictly defined, did not emerge as an orientation, the constituent parts of the integrative orientation did appear in these general orientations. The first component, positive affective regard toward members of the second culture, defined the general friendship orientation. It was also important in defining the general travel and, to a lesser extent, the general knowledge orientation. The second component, identification with members of the target culture, was an important component of the general knowledge orientation, especially for the anglophone groups. However, the results of the present study show that the general orientations are not integrative orientations and should not be considered as such (as was done, for example, by Spolsky, 1969, and Burstall, et al., 1974, who called travel an integrative orientation).

The role of the general orientations in the learning process was revealed by the regression analyses. Within each of the contexts, the multiple regression analyses showed that only general orientations were important determinants of a student's motivation to learn a language. With only one exception (in Group 7), none of the context-specific orientations accounted for more than 6% of the variance in motivation in these analyses. The LISREL analyses likewise indicated that each of the general orientations was a significant predictor of motivation in each of the contexts.

The absence of an integrative orientation coupled with the emergence of four clearly defined general orientations in the present study argues for a change in the basic concept of motivation as it has been used in second language learning. Heretofore, motivational goals have been conceived as the antipodal, relatively nebulous integrative and instrumental orientations (e.g., Gardner and Lambert, 1972). The language

learner has been classified as relatively more integrative (more friendly toward and ready to adopt the ways of the target group) or more instrumental (not integrative). The results of the present study suggest, instead, that the student is motivated by several concrete and discrete goals rather than by either an integrative or an instrumental orientation alone. It will be important that future studies adopt this revised conception of motivation, and account for the four general orientations described in the present study.

Effect of the Learning Context

While the present research demonstrated the existence and importance of four orientations to language learning common to many learning contexts, the effect of the learning context on the composition and importance of orientations was also demonstrated. Ethnolinguistic group membership appeared to be the most pervasive of the three factors studied, affecting the composition of orientations and both indices of their importance, as indicated by the LISREL and MANOVA analyses. A number of authors (e.g., Alptekin, 1981, 1983; Gardner and Lambert, 1972; Macnamara, 1973) have suggested that the dominance relationship existing between two ethnolinguistic groups might determine orientations to learning a second language. The present study, while providing evidence supporting this principle, did not support the specific predictions suggested by these authors: that minority group language learners are motivated by instrumental goals to learn a dominant language and that the integrative orientation is characteristic of dominant groups. The integrative orientation did not prove to be characteristic of either anglophones or francophones in the present study. Neither did any analysis indicate that the instrumental orientation was more important for the relatively subordinate francophone group learning English (or Spanish) than for the anglophones, or that the instrumental orientation was more important than other orientations for francophones.

Instead, the LISREL analyses showed that learning a language in order to make friends with members of the target group--traditionally an "integrative" orientation--was more highly correlated with motivation for francophones than were the other orientations, including the instrumental orientation. Similarly surprising, knowledge seeking--traditionally an "instrumental" orientation--was most highly endorsed by anglophone students. These results are contrary to what was expected, and clearly serve to reject the hypothesized roles played by the integrative and instrumental orientations to language learning for dominant and subordinate groups.

While the specific predictions regarding intergroup dominance were not supported by the results, the emergence of the *Anglophone Influence* and the *Dominance/Recognition* factors

in the intergroup factor analysis did indicate that dominance relationships between groups might determine, in part, language learning goals. The emergence of the *Anglophone Influence* factor in anglophone and not francophone groups may represent an influence-seeking orientation characteristic of the dominant anglophone ethnolinguistic group. The orientation suggests that these anglophones learn a second language partly in order to be influential in their own and in the second culture. An interesting follow-up to the present study would test whether this orientation exists among other anglophone groups in addition to the Canadians studied here, and thus whether it is a correlate of what Conrad and Fishman (1977) have called the "spread of English" as a world-dominant language.

Although not an effect of the Ethnolinguistic Group factor, the *Dominance/Recognition* factor of the intergroup factor analysis also appeared to be determined by intergroup dominance. The origins of the orientations composing this factor suggested that the dominance relationship pertaining to first and second language groups locally, rather than at the national level implied by ethnolinguistic group membership, was important in forming this factor. The composition of this factor suggested that learning a second language in order to be respected and to achieve recognition is characteristic of a locally dominant ethnolinguistic group. The emergence of this factor in locally dominant groups supports Giles's (Giles, et al., 1977; Giles and Byrne, 1982) notion that the perceived dominance of an ethnolinguistic group, called the "ethnolinguistic vitality" of the group relative to other groups, is determined by local political, economic, and sociostructural factors.

Finally, while the existence of the *Anglophone Influence* and the *Dominance/Recognition* factors attest to the effect of dominance relationships on the composition of language learning orientations, none of the orientations involved in these relationships was significantly related to a student's motivation to learn. The multiple regression analyses indicated that the influence orientations comprising the *Anglophone Influence* factor, and the prestige and respect orientations comprising the *Dominance/Recognition* factor accounted for at most three percent of the variance of motivation in any of the groups. While these orientations are associated with dominant groups, they do not appear to determine the day-to-day effort exerted by students to learn the language of a subordinate group.

To summarize the conclusions regarding the effects of ethnolinguistic group membership and intergroup dominance, results of the present study contradicted hypothesized relationships between the relative status of an ethnolinguistic group and the importance of integrative and instrumental orientations for language learners in the group. Pragmatic orientations, rather than "integrative" orientations, were associated with dominant groups. This included the emergence of the *Anglophone Influence* factor and the endorsement of the traditionally

"instrumental" knowledge orientation in the anglophone groups, the emergence of the *Dominance/Recognition* factor in locally dominant groups, and the relatively higher correlation between friendship (traditionally an "integrative" orientation) and motivation in the francophone groups.

While the effect of the *Ethnolinguistic Group* factor on the composition and importance of orientations occurred, with one exception, independently of the remaining two factors, the status of the target language and the cultural diversity of the milieu affected orientations in conjunction with other factors. Again, results concerning these factors were, for the most part, unexpected. It was predicted that francophones and anglophones would exhibit similar orientations to learning the minority language, Spanish, given that the socio-political relationship between these groups is more dynamic, in the Canadian context, than is the relationship between either group and hispanophones. Furthermore, it was thought that, because learning the minority Spanish language is more a "foreign" than a "second" language learning experience (see Gardner and Lambert, 1972; Marckwardt, 1965; Chihara and Oller, 1978), integrative reasons would be relatively more important orientations to learning Spanish for both anglophones and francophones. The cultural diversity of the milieu, on the other hand, would affect the salience of ethnolinguistic group membership in such a way that, it was thought, unicultural intergroup differences regarding orientations would be exaggerated in multicultural settings where there is greater contact between groups. Thus, an interactive effect of the *Ethnolinguistic Group* and *Milieu* factors was expected.

The composition of two of the factors in the intergroup factor analysis, both concerned with involvement of the learner in the target culture, did result from interaction between *Milieu* and the other two factors. These were the *Social/Cultural* and *Familiarity/Involvement* factors. The *Social/Cultural* dimension was produced as an interaction of *Milieu* with each of the other factors. An orientation for learners of a minority language in a unicultural milieu and for francophones in a multicultural milieu was to learn about and participate in the cultural activities of the target language culture, and in doing so, to gain social esteem. The *Familiarity/Involvement* dimension was produced as an interaction between the *Milieu* and *Ethnolinguistic Group* factors. The orientations on this dimension represented different levels of involvement in the second culture, from the highly involved integration and identification orientations for francophones in a multicultural milieu to the antipodal distant interest and intellectual orientations for francophones in a unicultural milieu. While anglophones in a unicultural milieu were not represented on the *Familiarity/Involvement* dimension, anglophones in a multicultural milieu were represented by knowledge orientation on the "distant interest" pole of the dimension. Thus, the effect of intergroup contact, as assessed in the *Milieu* factor, on a student's desire to be involved in a second culture, appears to be complex, changing

with the ethnolinguistic group of the student and the language studied. These results parallel the description given of the complex relationship between intergroup contact and attitudes which have been observed to vary according to the type of contact pertaining between groups (Amir, 1969, 1976; Schumann, 1976).

The *Familiarity/Involvement* dimension, as with the *Dominance/Recognition* dimension discussed earlier, emerged in milieux where direct contact between first and second language groups could exist. These results suggest that the effect of the cultural diversity of the milieu on the emergence of orientations is caused by the contact between groups in the milieu, rather than the cultural diversity per se. Again, these results parallel observations concerning intergroup contact and attitudes toward other groups. Kalin and Berry (1982) noted that the direct relationship found in their study between positive attitudes toward a group and that group's demographic representation in a community was specific to the presence of that group in the community, and not to the ethnic heterogeneity of the community in general. It appears that some of the same socio-cultural factors that have been shown to affect attitudes towards other groups also determine language learning goals.

The *Milieu* by *Ethnolinguistic Group* interaction manifested by the pattern of factor loadings on the *Familiarity/Involvement* dimension reveals an effect of intergroup contact on francophone language learners. Francophones in high contact situations (multicultural milieu) were represented on this dimension by orientations expressing the desire for greater involvement in the second language community. Québec francophones, on the other hand, with less intergroup contact, were represented by orientations expressing the desire to maintain a distance between their groups and the target groups. For the francophone groups (but not for anglophones), it appears that intergroup contact may encourage the desire for more contact.

While neither the status of the target language nor the cultural diversity of the milieu significantly affected the relationship between orientations and motivation, the interaction of these factors did affect student endorsement of the instrumental and travel orientations. On a continuum defined by these orientations at opposite poles, learners of the official languages tended to endorse the instrumental and depreciate the travel orientation relative to learners of the minority language. However, significant differences were found between unicultural and multicultural official language learners, with multicultural groups closer to the travel end of the continuum. Although not predicted, the differences between official and minority language learners appear to follow what might have been predicted from common sense, that students learning an official language should do so for utilitarian reasons while those learning the language of a locally less visible group should do so in order to travel to areas where the language is spoken.

More surprising, however, was the finding that, where the official languages would have greater utility, in a multicultural setting, students rated the instrumental orientation as less important than did students in the unicultural setting (on the instrumental-travel dimension). It would seem that living in a milieu where contact between ethnolinguistic groups is more available might cause students to devalue instrumental reasons for learning an official language. In that this was true for both francophone and anglophone groups, this result is another contradiction of the hypothesized importance of an instrumental orientation for minority groups (e.g., francophones) learning a majority language (English).

To summarize, the learning context did affect the composition and importance of orientations, although not as predicted. Membership in a specific ethnolinguistic group appeared to be the most important of the three contextual factors, affecting the composition of orientations, their relationship to motivation, and student endorsement of their importance. The dominance relationship pertaining between Canadian anglophones and francophones did not appear to be a decisive factor in the analyses, determining only the composition of an influence-seeking factor among the dominant anglophone groups. It was found that the dominance relationship pertaining between groups in the students' locale was more important than that pertaining generally between ethnolinguistic groups at the national level. In addition, the instrumental orientation did not prove to be more important for the relatively subordinate francophone group learning English, as had been predicted. Anglophone and francophone students alike tended to give equal importance to the instrumental orientation to learning French and English, respectively, and to the travel orientation to learning Spanish. In addition, the more motivated francophone students tended to stress a friendship-seeking orientation relative to the three other general orientations, including the instrumental orientation. Finally, there was some evidence to indicate that francophones, particularly those in contact with the second language group, were more inclined than anglophones to learn a language in order to become involved in the life of the second language group. Francophones in unicultural milieux along with anglophones in multicultural milieux, expressed the desire to learn about the life of the second culture while remaining at a distance from the culture.

Target language status and cultural composition of the milieu also affected the analyses in the present research in somewhat unexpected ways. Rather than being an important orientation for francophones, the instrumental orientation, as opposed to a travel orientation, was endorsed by both ethnolinguistic groups learning an official language. Contact with other cultures, however, appeared to diminish this importance for both groups. Instrumental goals may lessen in importance relative to intergroup contact (travel) goals as contact increases between ethnolinguistic groups. A similar effect was noted in the

composition of the *Familiarity/Involvement* dimension for the francophone unicultural versus multicultural groups.

Conclusion

The results of the present research support Gardner's (1977, 1980) contention that socio-cultural factors in the milieu affect the student's motivation to learn a second language. In addition to the problems encountered in defining what exactly are meant by "integrative" and "instrumental" orientations, the present research would suggest that one reason why different researchers have observed different relationships between motivation and achievement variables in language learning (see Oller, 1981a) is that socio-cultural variables were not considered. Very little research has examined motivational factors in second language acquisition across different contexts (see Clément, 1980; Gardner, 1977, 1979; Oller, 1981a). To some extent, Gardner's language learning models, including his most recent socio-educational model (1981, in press; Gardner, Lalonde, and Pierson, 1983), include this factor as the construct "cultural beliefs" of the student. In this model, cultural beliefs subsume beliefs regarding the importance and feasibility of learning a second language, as well as beliefs about other cultural groups. The present research indicates that this construct is inadequate in that it does not appear to include potentially important contextual factors, such as the degree of contact between the groups or the relative status of the groups. An improvement to Gardner's model would be to specify how formal aspects of the learning context might affect the cultural beliefs of the learner.

The results of the present research also tend to support the basic role assigned orientations in Gardner's (1979, in press; Gardner, et al., 1974) models of language acquisition. These models posit orientations to be precursors of motivation, which, along with attitudes (toward the target group and other cultural groups in general, and toward the learning situation) serve to sustain motivation through the long learning process. Gardner's models have emphasized integrative and instrumental orientations, however, without formally considering other orientations. The present research indicated that an integrative orientation is not important in the contexts studied, but that instrumental, as well as travel, friendship, and knowledge orientations did serve to direct students' motivation. An integrative orientation might be important in learning contexts not considered in the present research, such as for advanced language learners or for immigrants living in the second culture, but the results indicated that the desire to identify with affectively valued members of the second community is not an important language learning goal in the traditional classroom setting. Of potential importance for future research, measures of the instrumental, travel, friendship, and knowledge orienta-

tions were developed which were internally consistent and which, given their relationship to students' motivation, demonstrated construct validity.

Practical implications of the present research for the teaching of second languages follow from the theoretical. The research demonstrated the importance of specific goals in supporting student motivation to learn a second language. It follows that the teacher who is able to manifest these goals--embodied by the instrumental, travel, friendship, and knowledge orientations--in daily teaching practices should further motivate the student to learn. However, equally important, the finding that orientations varied from one learning context to another, and that even the general orientations were differentially important across the contexts considered in the present study, indicates that the teacher will need to learn from the students themselves what goals might be important to them, and to vary the teaching program accordingly.

Some guidelines for teachers were indicated by the present study. Canadian anglophones, and possibly relatively dominant groups in general, might be initially attracted to learning a language in order to become more knowledgeable about a new culture and about languages in general. It may be important, however, for these students, and for Canadian francophones in relatively unicultural milieux, to maintain a distance between themselves and the second culture. Thus, the teacher should probably not emphasize how the student might learn to behave differently, in the manner of members of the second culture. The teacher might instead emphasize similarities between the two cultures, rather than differences, as was also suggested in a study by Tuttle, Guitart, Papilla, and Zambogna (1979). For Canadian francophones, on the other hand, and possibly relatively subordinate ethnolinguistic groups in general, stressing the growth of affective ties between the student and members of the second culture is important. The study also indicated that students, especially francophones, in multicultural milieux would respond favorably to activities where contact between ethnolinguistic groups occurs.

Finally, teachers should note that the present research clearly indicates that the integrative orientation, thought by many to be a necessary component of language learning, probably does not exist in the traditional classroom setting. Designing a language course around this concept in an attempt to expose the student as much as possible to life in the second culture--a not uncommon method in secondary schools and undergraduate university courses--will probably not serve to motivate students and may, in fact, discourage them from learning the language.

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A P P E N D I X A :

QUESTIONNAIRES USED IN THE STUDY

Questionnaire used for anglophones learning French

This investigation is designed to study some of the reasons people give for studying a second language. Your answers to any or all questions will be treated with the strictest confidence. Although we ask for your name on the cover page, we do so only because we must be able to associate your answers to this questionnaire with other information we will collect later. It is important for you to know, however, that before the questionnaires are examined, your questionnaire will be numbered, the same number will be put on the section containing your name, and then that section will be removed. By following a similar procedure with the other information we will be able to match the questionnaires through matching numbers and avoid having to associate your name directly with the questionnaire.

For the results of this survey to be meaningful, it is important that you be as accurate and as frank as possible in your answers. If you do not want to answer any particular item, or for that matter the entire questionnaire you do not have to. However, you should realize that the usefulness of your questionnaire will be lessened to the extent that you do not answer each item. We, therefore, urge you to answer all items unless it is important to you personally to omit certain ones. If you have difficulties or questions about any of the items, please raise your hand and someone will come to your assistance.

THIS SECTION WILL BE REMOVED IMMEDIATELY AFTER
THE QUESTIONNAIRE IS CODED

PLEASE PRINT

NAME _____ _____ _____
First Name Last Name Initial

SCHOOL _____ GRADE _____ CITY _____

BIRTHDATE _____ _____ _____ SEX FEMALE _____ MALE _____
Day Month Year

Following are a number of statements with which some people agree and others disagree. There are no right or wrong answers since many people have different opinions. Please rate how much you personally agree or disagree with these statements using the scale below:

-3 strongly disagree	+3 strongly agree
-2 moderately disagree	+2 moderately agree
-1 slightly disagree	+1 slightly agree

For each statement, write in the left margin the number corresponding to the amount of your agreement or disagreement. Note, there is no right or wrong answer. All that is important is that you indicate your personal feeling.

1. _____ Studying French can be important for me because it will allow me to be more at ease with fellow Canadians who speak French.
2. _____ Studying French can be important for me because it will help me find out how people live in French-speaking areas.
3. _____ Studying French can be important for me because I may need it to be admitted to a higher school.
4. _____ Studying French can be important for me because I think it will someday be useful in getting a good job.
5. _____ Studying French can be important for me because I would like to go to Québec.
6. _____ Studying French can be important for me because I'll need it for my future career.
7. _____ Studying French can be important for me because I want to become a member of the French Canadian community.
8. _____ Studying French can be important for me because it will help if I need to study another language later on.
9. _____ Studying French can be important for me because it will help me understand French Canadians and their way of life.
10. _____ Studying French can be important for me because I would like to go to France.
11. _____ Studying French can be important for me because it will make me a more knowledgeable person.
12. _____ Studying French can be important for me because I would like to meet some French people.
13. _____ Studying French can be important for me because it will help me appreciate the problems that French people have in a predominantly English-speaking milieu.
14. _____ Studying French can be important for me because I'll need it someday to get a degree.
15. _____ Studying French can be important for me because it will help me understand my own language better.

16. _____ Studying French can be important for me because I would like to make friends with some French people.
17. _____ Studying French can be important for me because it will make me appear more cultured.
18. _____ Studying French can be important for me because it will help me to be successful in business.
19. _____ Studying French can be important for me because it will be useful to me after I leave school.
20. _____ Studying French can be important for me because I feel that no one is really educated unless he is fluent in the French language.
21. _____ Studying French can be important for me because it will help me if I should ever travel.
22. _____ Studying French can be important for me because I would like to get a job where I could use my French.
23. _____ Studying French can be important for me because it will enable me to gain good friends more easily among French-speaking Canadians.
24. _____ Studying French can be important for me because other people will respect me more if I have a knowledge of another language.
25. _____ Studying French can be important for me because it will help me to get to know French-speaking people.
26. _____ Studying French can be important for me because it will permit me to become an influential member of my community.
27. _____ Studying French can be important for me because I will be able to participate more freely in the activities of other cultural groups.
28. _____ Studying French can be important for me because it will help me acquire new ideas and broaden my outlook.
29. _____ Studying French can be important for me because I need it in order to finish high school.
30. _____ Studying French can be important for me because it will help me to get a better paying job.
31. _____ Studying French can be important for me because it will help me to learn about myself.
32. _____ Studying French can be important for me because it will allow me to gain influence over French Canadians.
33. _____ Studying French can be important for me because it will allow me to meet and converse with more and varied people.
34. _____ Studying French can be important for me because it will help me if I ever enter politics.
35. _____ Studying French can be important for me because it will enable me to think and behave like French Canadians.
36. _____ Studying French can be important for me because I would like to travel to a French-speaking area.
37. _____ Studying French can be important for me because it will allow me to understand and appreciate French Canadian art and literature.

Please answer each of the following items by circling the letter of the alternative which appears to be *most* applicable to you. We should like to remind you that no individual teacher will have access to the questionnaires or any other information which associates your responses to this questionnaire with your name. We would urge you to be as *accurate as possible* since the success of this investigation depends on it.

1. *If I had the opportunity to speak French outside of school, I would:*
   a. Speak French most of the time, using English only if really necessary.
   b. Speak it occasionally, using English whenever possible.
   c. Never speak it.
2. *During French Class, I would like:*
   a. To have as much English as possible spoken.
   b. To have a combination of French and English spoken.
   c. To have only French spoken.
3. *I actively think about what I have learned in my French Class:*
   a. Once in a while.
   b. Hardly ever
   c. Very frequently.
4. *If there were a French Club in my school, I would:*
   a. Be most interested in joining.
   b. Attend meetings once in a while.
   c. Definitely not join.
5. *If French were not taught in school, I would:*
   a. Try to obtain lessons in French somewhere else.
   b. Not bother learning French at all.
   c. Pick up French in everyday situations (i.e., read French books and newspapers, try to speak it whenever possible, etc...).
6. *When I am in French class, I:*
   a. Never say anything.
   b. Answer only the easier questions.
   c. Volunteer answers as much as possible.
7. *If I had the opportunity and knew enough French, I would read French magazines and newspapers:*
   a. Not very often.
   b. As often as I could.
   c. Never.
8. *If there were a local French T.V. station, I would:*
   a. Turn it on occasionally.
   b. Never watch it.
   c. Try to watch it often.
9. *Compared to my other courses, I like French:*
   a. The same as all the others.
   b. The most.
   c. Least of all.

10. *When I hear a French song on the radio, I:*
    a. Change the station.
    b. Listen to the music, paying attention only to the easy words.
    c. Listen carefully and try to understand all the words.
11. *If it were up to me whether or not to take French, I:*
    a. Would drop it.
    b. Don't know whether I would take it or not.
    c. Would definitely take it.
12. *When I have a problem understanding something we are learning in French class, I:*
    a. Just forget about it.
    b. Immediately ask the teacher for help.
    c. Only seek help just before the exam.
13. *If there were French-speaking families in my neighborhood, I would:*
    a. Speak French with them sometimes.
    b. Speak French with them as much as possible.
    c. Never speak French with them.
14. *When it comes to French homework, I:*
    a. Just skim over it.
    b. Put some effort into it, but not as much as I could.
    c. Work very carefully, making sure I understand everything.
15. *If I had the opportunity to see a French play, I would:*
    a. Definitely go.
    b. Go only if I had nothing else to do.
    c. Not go.
16. *Considering how I study French, I can honestly say that I:*
    a. Really try to learn French.
    b. Will pass on the basis of sheer luck or intelligence because I do very little work.
    c. Do just enough work to get along.
17. *If the opportunity arose and I knew enough French, I would watch French T.V. programmes:*
    a. Never.
    b. Sometimes.
    c. As often as possible.
18. *After I get my French assignments back, I:*
    a. Just throw them in my desk and forget them.
    b. Look them over, but don't bother correcting mistakes.
    c. Always rewrite them, correcting my mistakes.
19. *I find studying French:*
    a. No more interesting than most subjects.
    b. Not interesting at all.
    c. Very interesting.
20. *If my teacher wanted someone to do an extra French assignment, I would:*
    a. Definitely volunteer.
    b. Only do it if the teacher asked me directly.
    c. Definitely not volunteer.

Questionnaire used for anglophones learning Spanish

This investigation is designed to study some of the reasons people give for studying a second language. Your answers to any or all questions will be treated with the strictest confidence. Although we ask for your name on the cover page, we do so only because we must be able to associate your answers to this questionnaire with other information we will collect later. It is important for you to know, however, that before the questionnaires are examined, your questionnaire will be numbered, the same number will be put on the section containing your name, and then that section will be removed. By following a similar procedure with the other information we will be able to match the questionnaires through matching numbers and avoid having to associate your name directly with the questionnaire.

For the results of this survey to be meaningful, it is important that you be as accurate and as frank as possible in your answers. If you do not want to answer any particular item, of for that matter the entire questionnaire you do not have to. However, you should realize that the usefulness of your questionnaire will be lessened to the extent that you do not answer each item. We, therefore, urge you to answer all items unless it is important to you personally to omit certain ones. If you have difficulties or questions about any of the items, please raise your hand and someone will come to your assistance.

THIS SECTION WILL BE REMOVED IMMEDIATELY AFTER
THE QUESTIONNAIRE IS CODED

PLEASE PRINT

NAME _____ _____ _____
First Name Last Name Initial

SCHOOL _____ GRADE _____ CITY _____

BIRTHDATE _____ _____ _____ SEX FEMALE _____ MALE _____
Day Month Year

Following are a number of statements with which some people agree and others disagree. There are no right or wrong answers since many people have different opinions. Please rate how much you personally agree or disagree with these statements using the scale below:

-3 strongly disagree	+3 strongly agree
-2 moderately disagree	+2 moderately agree
-1 slightly disagree	+1 slightly agree

For each statement, write in the left margin the number corresponding to the amount of your agreement or disagreement. Note, there is no right or wrong answer. All that is important is that you indicate your personal feeling.

1. _____ Studying Spanish can be important for me because it will allow me to be more at ease with fellow Canadians who speak Spanish.
2. _____ Studying Spanish can be important for me because it will help me find out how people live in Spanish-speaking areas.
3. _____ Studying Spanish can be important for me because I may need it to be admitted to a higher school.
4. _____ Studying Spanish can be important for me because I think it will someday be useful in getting a good job.
5. _____ Studying Spanish can be important for me because I would like to go to Mexico.
6. _____ Studying Spanish can be important for me because I'll need it for my future career.
7. _____ Studying Spanish can be important for me because I want to become a member of the Spanish community.
8. _____ Studying Spanish can be important for me because it will help if I need to study another language later on.
9. _____ Studying Spanish can be important for me because it will help me understand Spaniards and their way of life.
10. _____ Studying Spanish can be important for me because I would like to go to Spain.
11. _____ Studying Spanish can be important for me because it will make me a more knowledgeable person.
12. _____ Studying Spanish can be important for me because I would like to meet some Spanish people.
13. _____ Studying Spanish can be important for me because it will help me appreciate the problems that Spanish people have in a predominantly English-speaking milieu.
14. _____ Studying Spanish can be important for me because I'll need it someday to get a degree.
15. _____ Studying Spanish can be important for me because it will help me understand my own language better.

16. _____ Studying Spanish can be important for me because I would like to make friends with some Spanish people.
17. _____ Studying Spanish can be important for me because it will make me appear more cultured.
18. _____ Studying Spanish can be important for me because it will help me to be successful in business.
19. _____ Studying Spanish can be important for me because it will be useful to me after I leave school.
20. _____ Studying Spanish can be important for me because I feel that no one is really educated unless he is fluent in the Spanish language.
21. _____ Studying Spanish can be important for me because it will help me if I should ever travel.
22. _____ Studying Spanish can be important for me because I would like to get a job where I could use my Spanish.
23. _____ Studying Spanish can be important for me because it will enable me to gain good friends more easily among Spanish-speaking Canadians.
24. _____ Studying Spanish can be important for me because other people will respect me more if I have a knowledge of another language.
25. _____ Studying Spanish can be important for me because it will help me to get to know Spanish-speaking people.
26. _____ Studying Spanish can be important for me because it will permit me to become an influential member of my community.
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33. _____ Studying Spanish can be important for me because it will allow me to meet and converse with more and varied people.
34. _____ Studying Spanish can be important for me because it will help me if I ever enter politics.
35. _____ Studying Spanish can be important for me because it will enable me to think and behave like Spaniards.
36. _____ Studying Spanish can be important for me because I would like to travel to a Spanish-speaking area.
37. _____ Studying Spanish can be important for me because it will allow me to understand and appreciate Spanish art and literature.

Please answer each of the following items by circling the letter of the alternative which appears to be *most* applicable to you. We should like to remind you that no individual teacher will have access to the questionnaires or any other information which associates your responses to this questionnaire with your name. We would urge you to be as *accurate as possible* since the success of this investigation depends on it.

1. *If I had the opportunity to speak Spanish outside of school, I would:*
   a. Speak Spanish most of the time, using English only if really necessary.
   b. Speak it occasionally, using English whenever possible.
   c. Never speak it.
2. *During Spanish Class, I would like:*
   a. To have as much English as possible spoken.
   b. To have a combination of Spanish and English spoken.
   c. To have only Spanish spoken.
3. *I actively think about what I have learned in my Spanish Class:*
   a. Once in a while.
   b. Hardly ever
   c. Very frequently.
4. *If there were a Spanish Club in my school, I would:*
   a. Be most interested in joining.
   b. Attend meetings once in a while.
   c. Definitely not join.
5. *If Spanish were not taught in school, I would:*
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   b. Not bother learning Spanish at all.
   c. Pick up Spanish in everyday situations (i.e., read Spanish books and newspapers, try to speak it whenever possible, etc...).
6. *When I am in Spanish class, I:*
   a. Never say anything.
   b. Answer only the easier questions.
   c. Volunteer answers as much as possible.
7. *If I had the opportunity and knew enough Spanish, I would read Spanish magazines and newspapers:*
   a. Not very often.
   b. As often as I could.
   c. Never.
8. *If there were a local Spanish T.V. station, I would:*
   a. Turn it on occasionally.
   b. Never watch it.
   c. Try to watch it often.
9. *Compared to my other courses, I like Spanish:*
   a. The same as all the others.
   b. The most.
   c. Least of all.

10. *When I hear a Spanish song on the radio, I:*
    a. Change the station.
    b. Listen to the music, paying attention only to the easy words.
    c. Listen carefully and try to understand all the words.
11. *If it were up to me whether or not to take Spanish, I:*
    a. Would drop it.
    b. Don't know whether I would take it or not.
    c. Would definitely take it.
12. *When I have a problem understanding something we are learning in Spanish class, I:*
    a. Just forget about it.
    b. Immediately ask the teacher for help.
    c. Only seek help just before the exam.
13. *If there were Spanish-speaking families in my neighborhood, I would:*
    a. Speak Spanish with them sometimes.
    b. Speak Spanish with them as much as possible.
    c. Never speak Spanish with them.
14. *When it comes to Spanish homework, I:*
    a. Just skim over it.
    b. Put some effort into it, but not as much as I could.
    c. Work very carefully, making sure I understand everything.
15. *If I had the opportunity to see a Spanish play, I would:*
    a. Definitely go.
    b. Go only if I had nothing else to do.
    c. Not go.
16. *Considering how I study Spanish, I can honestly say that I:*
    a. Really try to learn Spanish
    b. Will pass on the basis of sheer luck or intelligence because I do very little work.
    c. Do just enough work to get along.
17. *If the opportunity arose and I knew enough Spanish, I would watch Spanish T.V. programmes:*
    a. Never.
    b. Sometimes.
    c. As often as possible.
18. *After I get my Spanish assignments back, I:*
    a. Just throw them in my desk and forget them.
    b. Look them over, but don't bother correcting mistakes.
    c. Always rewrite them, correcting my mistakes.
19. *I find studying Spanish:*
    a. No more interesting than most subjects.
    b. Not interesting at all.
    c. Very interesting.
20. *If my teacher wanted someone to do an extra Spanish assignment, I would:*
    a. Definitely volunteer.
    b. Only do it if the teacher asked me directly.
    c. Definitely not volunteer.

Questionnaire used for francophones learning English

Cette enquête a pour but d'étudier les raisons que les gens donnent pour étudier une langue seconde. Vos réponses à chacune des questions demeureront strictement confidentielles. Bien que nous vous demandions d'inscrire votre nom sur la page couverture, nous le faisons simplement pour être en mesure d'associer ce questionnaire avec d'autres informations que nous recueillerons plus tard. Il est toutefois important pour vous de savoir qu'avant d'être examinés, les questionnaires seront numérotés. Ce numéro sera inscrit sur la section incluant votre nom, puis cette section sera détachée. En suivant la même procédure avec tous les questionnaires, nous pourrons les regrouper d'après les numéros, évitant ainsi d'associer directement votre nom au questionnaire.

Afin que ce sondage soit significatif, il est important que vos réponses soient aussi précises et aussi franches que possible. Vous êtes libre de refuser de répondre à certaines questions ou même au questionnaire entier. Cependant vous devez réaliser que la valeur de l'ensemble de vos réponses sera diminuée dans la mesure où vous ne répondrez pas à toutes les questions. Nous insistons donc pour que vous répondiez à toutes les questions, à moins qu'il vous soit personnellement important de vous abstenir. Si vous éprouvez certaines difficultés ou avez des questions à poser sur une des questions, levez la main et quelqu'un vous viendra en aide.

CETTE SECTION SERA DÉTRUITE IMMÉDIATEMENT APRÈS QUE CE QUESTIONNAIRE AURA ÉTÉ CODIFIÉ

(ÉCRIRE EN LETTRES MAJUSCULES S.V.P.)

NOM _____ _____
Nom Prénom

ÉCOLE _____ CLASSE _____

DATE DE NAISSANCE _____ _____ _____ SEXE F _____ M ____
Jour Mois Année

Dans les pages qui suivent vous trouverez un certain nombre d'affirmations avec lesquelles certaines personnes sont d'accord et d'autres non. Il n'y a pas de bonne ou de mauvaise réponse, étant donné que chacun a le droit d'avoir des opinions personnelles. Indiquez la mesure dans laquelle vous êtes d'accord avec ces affirmations en utilisant l'échelle suivante:

-3 je désapprouve tout à fait	+3 j'approuve fortement
-2 je désapprouve légèrement	+2 j'approuve légèrement
-1 je désapprouve très légèrement	+1 j'approuve très légèrement

Pour chacune des affirmations suivantes, inscrivez dans la marge de gauche le chiffre correspondant à votre opinion. Notez qu'il n'y a pas de bonne ou de mauvaise réponse; tout ce qui est important, c'est que vous donniez votre opinion personnelle.

1. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra d'être plus à l'aise avec des personnes parlant anglais.
2. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra d'apprendre comment vivent les gens demeurant dans des régions anglaises.
3. _____ Il est important pour moi d'apprendre l'anglais parce qu'il se peut que j'en aie besoin pour être admis(e) aux études supérieures.
4. _____ Il est important pour moi d'apprendre l'anglais parce que cela pourra m'être utile un jour pour trouver un bon emploi.
5. _____ Il est important pour moi d'apprendre l'anglais parce que j'aimerais voyager partout au Canada.
6. _____ Il est important pour moi d'apprendre l'anglais parce que cela me sera utile dans mon emploi éventuel.
7. _____ Il est important pour moi d'apprendre l'anglais parce que je veux devenir membre d'une communauté canadienne anglaise.
8. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra de mieux comprendre les anglophones et leur manière de vivre.
9. _____ Il est important pour moi d'apprendre l'anglais parce que cela m'aidera si je dois étudier une autre langue plus tard.
10. _____ Il est important pour moi d'apprendre l'anglais parce que j'aimerais aller aux États-Unis.
11. _____ Il est important pour moi d'apprendre l'anglais parce que cela fera de moi une personne mieux informée.
12. _____ Il est important pour moi d'apprendre l'anglais par ce que j'aimerais rencontrer des anglophones.
13. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra de mieux apprécier les

problèmes des anglophones qui vivent dans les régions anglaises.

14. _____ Il est important pour moi d'apprendre l'anglais parce que c'est nécessaire à l'obtention de mon diplôme.
15. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra de mieux comprendre ma propre langue.
16. _____ Il est important pour moi d'apprendre l'anglais parce que j'aimerais avoir des amis anglophones.
17. _____ Il est important pour moi d'apprendre l'anglais parce qu'ainsi je serai considéré(e) comme une personne vraiment éduquée.
18. _____ Il est important pour moi d'apprendre l'anglais parce que cela m'aidera à réussir en affaire.
19. _____ Il est important pour moi d'apprendre l'anglais parce que cela me sera utile lorsque j'aurai quitté l'école.
20. _____ Il est important pour moi d'apprendre l'anglais parce qu'une personne n'est pas vraiment éduquée à moins de parler anglais couramment.
21. _____ Il est important pour moi d'apprendre l'anglais parce que cela me sera utile lorsque je voudrai voyager.
22. _____ Il est important pour moi d'apprendre l'anglais parce que j'aimerais me trouver un emploi où je pourrai parler anglais.
23. _____ Il est important pour moi d'apprendre l'anglais parce qu'il serait alors plus facile pour moi de me faire des amis anglophones.
24. _____ Il est important pour moi d'apprendre l'anglais parce que les gens me respecteront d'avantage si je connais une autre langue.
25. _____ Il est important pour moi d'apprendre l'anglais parce que ça me permettra d'apprendre à connaître des anglophones.
26. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra de devenir un membre influent de ma communauté.
27. _____ Il est important pour moi d'apprendre l'anglais parce qu'ainsi je pourrai participer plus librement aux activités d'autres groupes culturels.
28. _____ Il est important pour moi d'apprendre l'anglais parce que ça me permettra d'élargir mes connaissances ainsi que ma façon de voir les choses.
29. _____ Il est important pour moi d'apprendre l'anglais parce que j'en aurai besoin pour terminer mon cours secondaire.
30. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra de me procurer un emploi dont le salaire est plus élevé.
31. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra d'apprendre à mieux me connaître.

32. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra de contrôler et dominer des Canadiens anglais.

33. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra de rencontrer et de converser avec un plus grand nombre et une plus grande variété de gens.

34. _____ Il est important pour moi d'apprendre l'anglais parce que cela sera à mon avantage si jamais j'entre en politique.

35. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra de penser et d'agir comme les Canadiens anglais.

36. _____ Il est important pour moi d'apprendre l'anglais parce que j'aimerais voyager dans des régions anglophones.

37. _____ Il est important pour moi d'apprendre l'anglais parce que cela me permettra de mieux comprendre et apprécier l'art et la littérature anglaise.

S'il vous plaît, répondre à chacune des affirmations suivantes en encerclant la lettre correspondant à la réponse qui vous décrit le mieux. Nous tenons à vous rappeler qu'aucun de vos professeurs n'aura accès à ce questionnaire ni à toute autre information qui associerait ce questionnaire à votre nom.

Étant donné que le succès de cette recherche dépend de votre franchise, nous insistons pour que vous répondiez le plus spontanément possible.

1. *Je pense à ce que j'ai appris au cours d'anglais...*
   a. Pratiquement jamais.
   b. De temps à autre.
   c. Très fréquemment.
2. *S'il y avait des familles de langue anglaise dans mon entourage...*
   a. Je leur parlerais anglais aussi souvent que possible.
   b. Je leur parlerais anglais de temps à autre.
   c. Je ne leur parlerais jamais en anglais.
3. *Lorsque j'ai de la difficulté à comprendre quelque chose enseigné au cours d'anglais...*
   a. Je n'en fais pas de cas.
   b. Je demande immédiatement l'aide du professeur.
   c. Je demande de l'aide avant l'examen.
4. *En comparant mon cours d'anglais avec les autres cours, c'est celui que j'aime...*
   a. Le plus.
   b. Le moins.
   c. Comme tous les autres.
5. *Lorsque je reçois mes devoirs corrigés...*
   a. Je les mets dans mon pupitre et je les oublie.
   b. Je les recopie en corrigeant les fautes.
   c. Je les relis sans me préoccuper de corriger les fautes.
6. *Si j'avais l'occasion de voir une pièce en anglais...*
   a. J'y assisterais sûrement.
   b. J'y assisterais si je n'avais rien d'autre à faire.
   c. Je n'y assisterais pas.
7. *Lorsque j'entends une chanson anglaise à la radio...*
   a. Je change de poste.
   b. J'écoute la musique en faisant attention aux mots qui sont les plus faciles.
   c. J'écoute attentivement en essayant de comprendre tous les mots.
8. *Je pense qu'étudier l'anglais est...*
   a. Très intéressant.
   b. N'est pas plus intéressant que la plupart des matières.
   c. N'est pas intéressant du tout.

9. *Lorsque je suis au cours d'anglais...*
   a. Je ne parle jamais.
   b. Je réponds seulement aux questions faciles.
   c. Je lève la main pour répondre le plus souvent possible.
10. *Si je savais suffisamment l'anglais et si j'en avais l'occasion, je lirais des revues et des journaux anglais...*
   a. Le plus souvent possible.
   b. Pas très souvent
   c. Jamais.
11. *Si mon professeur demandait à quelqu'un de faire un devoir supplémentaire en anglais...*
   a. Je ne serais sûrement pas volontaire.
   b. J'accepterais seulement si le professeur me le demandait directement.
   c. J'accepterais sûrement.
12. *S'il y avait un club d'anglais à mon école...*
   a. Je n'en ferais pas partie.
   b. Je serais très intéressé(e) à en faire partie.
   c. J'irais aux réunions de temps à autre.
13. *En considérant la façon dont j'apprends l'anglais, je peux dire honnêtement que...*
   a. Si je réussis, ce sera par chance ou parce que je suis intelligent(e), car je travaille très peu.
   b. J'essaie vraiment d'apprendre l'anglais.
   c. Je fais juste assez de travail pour réussir.
14. *Si j'en avais l'occasion et si je savais suffisamment l'anglais, je suivrais à la télévision des émissions anglaises...*
   a. Jamais.
   b. Quelquefois.
   c. Le plus souvent possible.
15. *J'écoute la télévision en anglais...*
   a. Jamais.
   b. Le plus souvent possible.
   c. Occasionnellement.
16. *Si j'avais l'occasion de parler anglais à l'extérieur de l'école...*
   a. Je ne parlerais jamais anglais.
   b. Je le parlerais à l'occasion, en employant le français le plus possible.
   c. Je parlerais anglais presque tout le temps: j'utiliserais le français seulement si c'était nécessaire.
17. *Si l'anglais n'étais pas enseigné à l'école...*
   a. Je ne me préoccuperais pas du tout d'apprendre l'anglais.
   b. J'essaierais de prendre des cours d'anglais ailleurs.
   c. J'essaierais d'apprendre l'anglais dans la vie de tous les jours (lire des journaux et des livres anglais, essayer de le parler chaque fois que c'est possible, etc.).

18. *Pendant le cours d'anglais, j'aimerais...*
    a. Que l'on parle seulement l'anglais.
    b. Que l'on mélange le français et l'anglais.
    c. Que l'on parle le plus de français possible.
19. *Lorsqu'il s'agit des devoirs d'anglais...*
    a. Je m'en débarrasse.
    b. Je fais un effort mais pas autant que je pourrais.
    c. Je travaille très attentivement pour être certain(e) de tout comprendre.
20. *Si j'avais le choix de suivre (ou non) le cours d'anglais...*
    a. Je ne sais pas si je le suivrais ou non.
    b. Je le suivrais certainement.
    c. J'abandonnerais le cours.

Questionnaire used for francophones learning Spanish

Cette enquête a pour but d'étudier les raisons que les gens donnent pour étudier une langue seconde. Vos réponses à chacune des questions demeureront strictement confidentielles. Bien que nous vous demandions d'inscrire votre nom sur la page couverture, nous le faisons simplement pour être en mesure d'associer ce questionnaire avec d'autres informations que nous recueillerons plus tard. Il est toutefois important pour vous de savoir qu'avant d'être examinés, les questionnaires seront numérotés. Ce numéro sera inscrit sur la section incluant votre nom, puis cette section sera détachée. En suivant la même procédure avec tous les questionnaires, nous pourrons les regrouper d'après les numéros, évitant ainsi d'associer directement votre nom au questionnaire.

Afin que ce sondage soit significatif, il est important que vos réponses soient aussi précises et aussi franches que possible. Vous êtes libre de refuser de répondre à certaines questions ou même au questionnaire entier. Cependant vous devez réaliser que la valeur de l'ensemble de vos réponses sera diminuée dans la mesure où vous ne répondrez pas à toutes les questions. Nous insistons donc pour que vous répondiez à toutes les questions, à moins qu'il vous soit personnellement important de vous abstenir. Si vous éprouvez certaines difficultés ou avez des questions à poser sur une des questions, levez la main et quelqu'un vous viendra en aide.

CETTE SECTION SERA DÉTRUITE IMMÉDIATEMENT APRÈS QUE CE QUESTIONNAIRE AURA ÉTÉ CODIFIÉ

(ÉCRIRE EN LETTRES MAJUSCULES S.V.P.)

NOM _____ _____
Nom Prénom

ÉCOLE _____ CLASSE _____

DATE DE NAISSANCE _____ _____ _____ SEXE F _____ M ____
Jour Mois Année

Dans les pages qui suivent vous trouverez un certain nombre d'affirmations avec lesquelles certaines personnes sont d'accord et d'autres non. Il n'y a pas de bonne ou de mauvaise réponse, étant donné que chacun a le droit d'avoir des opinions personnelles. Indiquez la mesure dans laquelle vous êtes d'accord avec ces affirmations en utilisant l'échelle suivante:

-3 je désapprouve tout à fait	+3 j'approuve fortement
-2 je désapprouve légèrement	+2 j'approuve légèrement
-1 je désapprouve très légèrement	+1 j'approuve très légèrement

Pour chacune des affirmations suivantes, inscrivez dans la marge de gauche le chiffre correspondant à votre opinion. Notez qu'il n'y a pas de bonne ou de mauvaise réponse; tout ce qui est important, c'est que vous donniez votre opinion personnelle.

1. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra d'être plus à l'aise avec des personnes parlant espagnol.
2. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra d'apprendre comment vivent les gens demeurant dans des régions espagnoles.
3. _____ Il est important pour moi d'apprendre l'espagnol parce qu'il se peut que j'en aie besoin pour être admis(e) aux études supérieures.
4. _____ Il est important pour moi d'apprendre l'espagnol parce que cela pourra m'être utile un jour pour trouver un bon emploi.
5. _____ Il est important pour moi d'apprendre l'espagnol parce que j'aimerais voyager partout en Amérique.
6. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me sera utile dans mon emploi éventuel.
7. _____ Il est important pour moi d'apprendre l'espagnol parce que je veux devenir membre d'une communauté espagnole.
8. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra de mieux comprendre les Espagnols et leur manière de vivre.
9. _____ Il est important pour moi d'apprendre l'espagnol parce que cela m'aidera si je dois étudier une autre langue plus tard.
10. _____ Il est important pour moi d'apprendre l'espagnol parce que j'aimerais aller au Mexique.
11. _____ Il est important pour moi d'apprendre l'espagnol parce que cela fera de moi une personne mieux informée.
12. _____ Il est important pour moi d'apprendre l'espagnol par ce que j'aimerais rencontrer des Espagnols.
13. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra de mieux apprécier les

problèmes des Espagnols qui vivent dans des régions espagnoles.

14. _____ Il est important pour moi d'apprendre l'espagnol parce que c'est nécessaire à l'obtention de mon diplôme.
15. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra de mieux comprendre ma propre langue.
16. _____ Il est important pour moi d'apprendre l'espagnol parce que j'aimerais avoir des amis espagnols.
17. _____ Il est important pour moi d'apprendre l'espagnol parce qu'ainsi je serai considéré(e) comme une personne vraiment éduquée.
18. _____ Il est important pour moi d'apprendre l'espagnol parce que cela m'aidera à réussir en affaire.
19. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me sera utile lorsque j'aurai quitté l'école.
20. _____ Il est important pour moi d'apprendre l'espagnol parce qu'une personne n'est pas vraiment éduquée à moins de le parler couramment.
21. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me sera utile lorsque je voudrai voyager.
22. _____ Il est important pour moi d'apprendre l'espagnol parce que j'aimerais me trouver un emploi où je pourrai parler espagnol.
23. _____ Il est important pour moi d'apprendre l'espagnol parce qu'il serait alors plus facile pour moi de me faire des amis espagnols.
24. _____ Il est important pour moi d'apprendre l'espagnol parce que les gens me respecteront d'avantage si je connais une autre langue.
25. _____ Il est important pour moi d'apprendre l'espagnol parce que ça me permettra d'apprendre à connaître des Espagnols.
26. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra de devenir un membre influent de ma communauté.
27. _____ Il est important pour moi d'apprendre l'espagnol parce qu'ainsi je pourrai participer plus librement aux activités d'autres groupes culturels.
28. _____ Il est important pour moi d'apprendre l'espagnol parce que ça me permettra d'élargir mes connaissances ainsi que ma façon de voir les choses.
29. _____ Il est important pour moi d'apprendre l'espagnol parce que j'en aurai besoin pour terminer mon cours secondaire.
30. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra de me procurer un emploi dont le salaire est plus élevé.
31. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra d'apprendre à mieux me connaître.

32. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra de contrôler et dominer des Espagnols.

33. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra de rencontrer et de converser avec un plus grand nombre et une plus grande variété de gens.

34. _____ Il est important pour moi d'apprendre l'espagnol parce que cela sera à mon avantage si jamais j'entre en politique.

35. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra de penser et d'agir comme les Espagnols.

36. _____ Il est important pour moi d'apprendre l'espagnol parce que j'aimerais voyager dans des régions où on parle espagnol.

37. _____ Il est important pour moi d'apprendre l'espagnol parce que cela me permettra de mieux comprendre et apprécier l'art et la littérature espagnols.

S'il vous plaît, répondre à chacune des affirmations suivantes en encerclant la lettre correspondant à la réponse qui vous décrit le mieux. Nous tenons à vous rappeler qu'aucun de vos professeurs n'aura accès à ce questionnaire ni à toute autre information qui associerait ce questionnaire à votre nom.

Étant donné que le succès de cette recherche dépend de votre franchise, nous insistons pour que vous répondiez le plus spontanément possible.

1. *Je pense à ce que j'ai appris au cours d'espagnol...*
   a. Pratiquement jamais.
   b. De temps à autre.
   c. Très fréquemment.
2. *S'il y avait des familles de langue espagnole dans mon entourage...*
   a. Je leur parlerais espagnol aussi souvent que possible.
   b. Je leur parlerais espagnol de temps à autre.
   c. Je ne leur parlerais jamais en espagnol.
3. *Lorsque j'ai de la difficulté à comprendre quelque chose enseigné au cours d'espagnol...*
   a. Je n'en fais pas de cas.
   b. Je demande immédiatement l'aide du professeur.
   c. Je demande de l'aide avant l'examen.
4. *En comparant mon cours d'espagnol avec les autres cours, c'est celui que j'aime...*
   a. Le plus.
   b. Le moins.
   c. Comme tous les autres.
5. *Lorsque je reçois mes devoirs corrigés...*
   a. Je les mets dans mon pupitre et je les oublie.
   b. Je les recopie en corrigeant les fautes.
   c. Je les relis sans me préoccuper de corriger les fautes.
6. *Si j'avais l'occasion de voir une pièce en espagnol...*
   a. J'y assisterais sûrement.
   b. J'y assisterais si je n'avais rien d'autre à faire.
   c. Je n'y assisterais pas.
7. *Lorsque j'entends une chanson espagnole à la radio...*
   a. Je change de poste.
   b. J'écoute la musique en faisant attention aux mots qui sont les plus faciles.
   c. J'écoute attentivement en essayant de comprendre tous les mots.
8. *Je pense qu'étudier l'espagnol est...*
   a. Très intéressant.
   b. N'est pas plus intéressant que la plupart des matières.
   c. N'est pas intéressant du tout.

9. *Lorsque je suis au cours d'espagnol...*
   a. Je ne parle jamais.
   b. Je réponds seulement aux questions faciles.
   c. Je lève la main pour répondre le plus souvent possible.
10. *Si je savais suffisamment l'espagnol et si j'en avais l'occasion, je lirais des revues et des journaux espagnol...*
   a. Le plus souvent possible.
   b. Pas très souvent
   c. Jamais.
11. *Si mon professeur demandait à quelqu'un de faire un devoir supplémentaire en espagnol...*
   a. Je ne serais sûrement pas volontaire.
   b. J'accepterais seulement si le professeur me le demandait directement.
   c. J'accepterais sûrement.
12. *S'il y avait un club d'espagnol à mon école...*
   a. Je n'en ferais pas partie.
   b. Je serais très intéressé(e) à en faire partie.
   c. J'irais aux réunions de temps à autre.
13. *En considérant la façon dont j'apprends l'espagnol, je peux dire honnêtement que...*
   a. Si je réussis, ce sera par chance ou parce que je suis intelligent(e), car je travaille très peu.
   b. J'essaie vraiment d'apprendre l'espagnol.
   c. Je fais juste assez de travail pour réussir.
14. *Si j'en avais l'occasion et si je savais suffisamment l'espagnol, je suivrais à la télévision des émissions espagnoles...*
   a. Jamais.
   b. Quelquefois.
   c. Le plus souvent possible.
15. *S'il y avait des émissions de télévision en espagnol je les écouterais...*
   a. Jamais.
   b. Le plus souvent possible.
   c. Occasionnellement.
16. *Si j'avais l'occasion de parler espagnol à l'extérieur de l'école...*
   a. Je ne parlerais jamais espagnol.
   b. Je le parlerais à l'occasion, en employant le français le plus possible.
   c. Je parlerais espagnol presque tout le temps: j'utiliserais le français seulement si c'était nécessaire.
17. *Si l'espagnol n'était pas enseigné à l'école...*
   a. Je ne me préoccuperais pas du tout d'apprendre l'espagnol.
   b. J'essaierais de prendre des cours d'espagnol ailleurs.

c. J'essaierais d'apprendre l'espagnol dans la vie de tous les jours (lire des journaux et des livres espagnols, essayer de le parler chaque fois que c'est possible, etc.).

18. *Pendant le cours d'espagnol, j'aimerais...*
   a. Que l'on parle seulement l'espagnol.
   b. Que l'on mélange le français et l'espagnol.
   c. Que l'on parle le plus de français possible.

19. *Lorsqu'il s'agit des devoirs d'espagnol...*
   a. Je m'en débarrasse.
   b. Je fais un effort mais pas autant que je pourrais.
   c. Je travaille très attentivement pour être certain(e) de tout comprendre.

20. *Si j'avais le choix de suivre (ou non) le cours d'espagnol...*
   a. Je ne sais pas si je le suivrais ou non.
   b. Je le suivrais certainement.
   c. J'abandonnerais le cours.

APPENDIX B:

TABLES

Table B-1

Internal Consistency Coefficients (Cronbach α) for Motivational Intensity and Desire to Learn Scales

Group	Motivational Intensity	Desire to Learn
1	.82	.87
2	.75	.77
3	.80	.85
4	.83	.89
5	.73	.80
6	.69	.72
7	.81	.85
8	.66	.70
Median	.78	.82

Table B-2

Intercorrelations Between Orientation Items for Group 1: Anglophones Learn French in a Unicultural Milieu

Item	1	2	3	4	5	6	7	8	9	10	11	12
2	.37	--										
3	.04	.13	--									
4	.19	.16	.32	--								
5	.32	.30	.09	.25	--							
6	.22	.11	.25	.62	.27	--						
7	.27	.32	.08	.25	.45	.31	--					
8	.16	.35	.25	.14	.34	.20	.36	--				
9	.26	.54	.02	.01	.38	.15	.27	.39	--			
10	.28	.29	.23	.28	.51	.33	.36	.31	.32	--		
11	.34	.18	.27	.37	.44	.32	.31	.38	.21	.37	--	
12	.36	.31	.14	.30	.54	.29	.44	.29	.38	.52	.54	--
13	.18	.37	.12	.13	.25	.09	.15	.17	.31	.12	.07	.24
14	.13	.12	.51	.54	.20	.56	.22	.28	.01	.24	.25	.24
15	.22	.18	.16	.16	.44	.13	.35	.41	.26	.31	.54	.39
16	.43	.29	.11	.19	.54	.17	.40	.30	.30	.40	.52	.77
17	.29	.29	.14	.19	.36	.29	.47	.38	.31	.38	.55	.44
18	.22	.26	.14	.57	.24	.46	.30	.19	.14	.37	.43	.26
19	.39	.20	.21	.55	.37	.59	.36	.34	.20	.36	.47	.36
20	.27	.15	.12	.14	.33	.24	.35	.26	.15	.19	.13	.14
21	.31	.16	.18	.24	.36	.26	.19	.32	.23	.49	.33	.30
22	.26	.25	.15	.51	.35	.54	.53	.22	.14	.51	.38	.36
23	.39	.29	.14	.05	.31	.08	.25	.34	.27	.31	.32	.38
24	.09	.13	.09	.05	.27	.16	.25	.24	.20	.19	.30	.26
25	.46	.50	.03	.14	.45	.11	.33	.33	.41	.29	.39	.46
26	.30	.21	.02	.23	.19	.21	.31	.15	.12	.25	.28	.30
27	.43	.33	.19	.34	.33	.29	.35	.25	.20	.39	.48	.44
28	.38	.33	.21	.33	.43	.30	.32	.30	.39	.42	.50	.45
29	.04	.09	.47	.16	.06	.22	.13	.19	.04	.11	.11	-.02
30	.18	.07	.28	.63	.10	.54	.17	.12	-.04	.20	.34	.24
31	.37	.41	.11	.20	.21	.19	.46	.29	.32	.19	.25	.30
32	.17	.15	-.07	-.08	-.07	.02	.09	.04	.12	-.02	-.01	-.10
33	.51	.24	.14	.34	.44	.35	.32	.41	.33	.47	.58	.65
34	.04	.01	.02	.02	.14	.13	.08	.13	.11	.08	.13	.11
35	.22	.26	.06	-.01	.23	.08	.33	.17	.38	.12	.13	.21
36	.28	.22	.14	.39	.59	.41	.40	.31	.23	.65	.41	.55
37	.35	.34	.12	.11	.21	.10	.24	.29	.33	.10	.18	.23

(Table B-2 continued)

Item	13	14	15	16	17	18	19	20	21	22	23	24
14	.09	--										
15	.19	.14	--									
16	.20	.10	.38	--								
17	.19	.24	.36	.36	--							
18	.08	.46	.28	.25	.45	--						
19	.18	.43	.30	.29	.34	.51	--					
20	.18	.23	.14	.19	.26	.26	.29	--				
21	.17	.13	.36	.29	.25	.37	.37	.20	--			
22	.20	.35	.30	.31	.37	.48	.52	.32	.29	--		
23	.32	-.05	.35	.49	.29	.12	.22	.15	.28	.17	--	
24	.08	.14	.32	.29	.35	.30	.29	.25	.16	.16	.43	--
25	.38	.10	.35	.49	.39	.13	.28	.19	.21	.32	.54	.25
26	.25	.17	.22	.33	.38	.36	.30	.32	.19	.42	.31	.39
27	.22	.11	.27	.44	.44	.46	.40	.23	.31	.35	.40	.22
28	.32	.19	.45	.37	.42	.40	.46	.31	.41	.42	.31	.36
29	.17	.48	.18	-.03	.19	.20	.15	.13	.15	.22	.12	.19
30	.07	.59	.23	.15	.24	.64	.50	.19	.25	.46	.02	.19
31	.38	.17	.30	.25	.34	.25	.25	.28	.20	.35	.30	.21
32	.04	.01	.02	-.13	.24	.11	-.05	.09	-.02	.04	.11	.12
33	.29	.25	.43	.57	.47	.31	.44	.25	.46	.46	.42	.25
34	.11	.07	.14	.16	.24	.14	.14	-.03	.08	.05	.18	.32
35	.17	.04	.20	.20	.20	.12	.08	.26	.10	.11	.13	.18
36	.05	.30	.29	.48	.43	.34	.45	.27	.39	.51	.21	.18
37	.29	.13	.20	.28	.31	.17	.11	.20	.26	.12	.30	.16

Item	25	26	27	28	29	30	31	32	33	34	35	36
26	.38	--										
27	.42	.41	--									
28	.44	.43	.42	--								
29	.12	.09	.07	.23	--							
30	.07	.38	.26	.26	.31	--						
31	.41	.31	.38	.37	.32	.27	--					
32	.07	.30	.18	.01	.12	.09	.38	--				
33	.48	.35	.50	.57	.10	.30	.41	.03	--			
34	.15	.15	.11	.13	.09	.11	-.04	.16	.23	--		
35	.18	.20	.16	.28	.15	.06	.43	.17	.21	-.06	--	
36	.31	.23	.41	.47	.16	.27	.22	-.06	.55	.14	.16	--
37	.39	.25	.24	.42	.25	.10	.46	.07	.35	.06	.26	.18

Table B-3

Intercorrelations Between Orientation Items for Group 2: Anglophones Learn French in a Multicultural Milieu

Item	1	2	3	4	5	6	7	8	9	10	11	12
2	.34	--										
3	.25	.12	--									
4	.43	.31	.47	--								
5	.40	.31	.14	.29	--							
6	.25	.38	.43	.54	.38	--						
7	.18	.41	.11	.14	.25	.23	--					
8	.36	.19	.14	.28	.22	.32	.13	--				
9	.37	.69	.10	.27	.13	.30	.39	.33	--			
10	.37	.31	.09	.34	.48	.34	.18	.40	.31	--		
11	.42	.28	.36	.50	.25	.17	.23	.32	.27	.33	--	
12	.46	.39	.17	.37	.58	.34	.36	.33	.32	.45	.48	--
13	.13	.45	.03	.17	.23	.14	.52	.05	.45	.23	.30	.28
14	.21	.23	.60	.44	.05	.40	.20	.19	.28	.12	.25	.09
15	.05	.14	-.04	.02	.20	.02	.29	.21	.12	.08	.23	.17
16	.39	.43	.00	.30	.47	.17	.41	.30	.36	.42	.37	.76
17	.08	.19	.08	.35	.11	.19	.18	.18	.25	.11	.20	.12
18	.34	.33	.31	.50	.15	.36	.08	.20	.29	.18	.37	.25
19	.40	.32	.40	.71	.38	.47	.20	.33	.26	.31	.45	.44
20	.20	.17	.17	.20	.17	.12	.19	.13	.15	.10	.27	.36
21	.34	.20	.30	.50	.25	.38	.16	.44	.24	.37	.43	.35
22	.27	.33	.24	.41	.39	.54	.30	.26	.28	.35	.18	.39
23	.39	.35	.14	.24	.36	.20	.25	.25	.25	.34	.28	.51
24	.18	.11	.21	.15	.15	.09	.20	.20	.15	.04	.23	.21
25	.44	.38	.01	.40	.44	.29	.22	.21	.33	.43	.35	.63
26	.38	.35	-.04	.29	.19	.11	.08	.11	.26	.17	.16	.30
27	.31	.40	.26	.18	.28	.30	.33	.25	.36	.29	.28	.41
28	.31	.23	.24	.38	.16	.23	.05	.07	.13	.23	.47	.30
29	.21	.24	.37	.33	.06	.29	.06	.13	.19	.09	.13	.14
30	.23	.19	.60	.56	.14	.55	.10	.30	.17	.27	.25	.21
31	.17	.45	.10	.21	.18	.21	.43	.10	.36	.17	.26	.26
32	.22	.31	-.05	.18	.16	.24	.21	.23	.30	.05	.04	.28
33	.26	.25	.25	.31	.30	.40	.08	.12	.15	.20	.26	.36
34	.24	.12	.13	.22	.10	.04	-.06	.21	.18	.17	.25	.25
35	.08	.33	.00	.00	.02	.03	.26	.04	.29	.11	.15	.12
36	.27	.29	.16	.31	.49	.28	.19	.29	.22	.59	.40	.48
37	.41	.29	.11	.25	.34	.22	.30	.19	.29	.25	.37	.38

(Table B-3 continued)

Item	13	14	15	16	17	18	19	20	21	22	23	24
14	.11	--										
15	.25	-.02	--									
16	.26	.05	.25	--								
17	.19	.22	.00	-.02	--							
18	.15	.49	.04	.15	.43	--						
19	.12	.45	.08	.43	.26	.46	--					
20	.25	.19	.07	.21	.24	.15	.24	--				
21	.10	.36	.21	.29	.13	.36	.56	.22	--			
22	.18	.28	.04	.44	.27	.34	.51	.31	.39	--		
23	.28	.11	.29	.56	.05	.38	.37	.27	.31	.25	--	
24	.16	.31	.31	.15	.48	.30	.19	.43	.28	.22	.26	--
25	.30	.18	.27	.61	.19	.38	.48	.41	.40	.34	.56	.21
26	.19	.13	-.05	.29	.43	.28	.29	.37	.18	.31	.29	.32
27	.21	.22	.28	.32	.08	.35	.22	.36	.31	.27	.46	.38
28	.20	.15	.15	.16	.13	.21	.33	.23	.31	.13	.18	.10
29	.20	.44	-.09	.09	.07	.31	.31	.09	.11	.28	.14	-.04
30	-.01	.57	-.13	.10	.35	.52	.42	.04	.41	.40	.19	.24
31	.34	.25	.27	.25	.36	.27	.15	.25	.05	.25	.26	.41
32	.13	-.05	.24	.17	.36	.34	.18	.14	.13	.24	.30	.30
33	.10	.28	.12	.21	.18	.30	.39	.20	.36	.26	.32	.10
34	.05	.12	.02	.17	.28	.39	.20	-.02	.30	.09	.19	.20
35	.36	.25	.08	.19	.25	.28	.02	.32	.11	.14	.15	.22
36	.19	.07	.15	.38	.07	.13	.37	.35	.39	.40	.30	.22
37	.16	.13	.23	.41	.21	.15	.32	.24	.24	.35	.27	.20

Item	25	26	27	28	29	30	31	32	33	34	35	36
26	.46	--										
27	.39	.27	--									
28	.35	.15	.18	--								
29	.19	.18	-.04	.11	--							
30	.24	.26	.29	.10	.45	--						
31	.29	.29	.37	.26	.17	.18	--					
32	.37	.32	.27	.02	.19	.27	.25	--				
33	.52	.19	.36	.44	.13	.30	.20	.12	--			
34	.25	.29	.22	.24	.16	.31	.07	.15	.32	--		
35	.29	.31	.32	.03	.15	.06	.33	.20	.13	.10	--	
36	.36	.18	.44	.27	-.02	.12	.26	.08	.31	.15	.19	--
37	.48	.34	.29	.30	.00	.08	.26	.12	.46	.30	.12	.38

Table B-4

Intercorrelations Between Orientation Items for Group 3: Anglophones Learn Spanish in a Unicultural Milieu

Item	1	2	3	4	5	6	7	8	9	10	11	12
2	.24	--										
3	.13	.21	--									
4	.16	.21	.40	--								
5	-.04	.18	.05	.19	--							
6	.16	.19	.31	.76	.28	--						
7	.18	.31	.17	.31	.09	.38	--					
8	.19	.33	.36	.26	.13	.22	.24	--				
9	.19	.53	.14	.23	.12	.19	.28	.14	--			
10	-.03	.14	.06	.17	.45	.28	.17	.07	.12	--		
11	-.04	.25	.21	.34	.02	.28	.05	.36	.38	.10	--	
12	.23	.36	.02	.26	.28	.34	.35	.09	.49	.36	.17	--
13	.26	.21	.05	.06	-.07	-.02	.14	.08	.31	-.07	.33	.13
14	.07	.20	.55	.37	.15	.47	.30	.49	.18	.07	.37	.06
15	.15	.17	.14	.22	.12	.23	.32	.26	.25	.23	.31	.21
16	.29	.35	.14	.33	.38	.41	.46	.24	.38	.37	.25	.65
17	.25	.27	.17	.31	.03	.20	.12	.16	.31	.05	.30	.24
18	.25	.27	.35	.54	.20	.56	.29	.34	.26	.16	.39	.18
19	.18	.08	.25	.60	.17	.71	.32	.28	.23	.35	.31	.30
20	.05	.12	.07	.18	.17	.13	.26	.15	.21	.10	.20	.25
21	-.06	.07	.09	.17	.29	.33	.12	.18	.16	.32	.26	.23
22	.24	.07	.08	.44	.08	.61	.45	.18	.14	.27	.10	.38
23	.29	.28	.19	.19	.15	.15	.25	.25	.30	.12	.22	.11
24	.14	.29	-.01	.23	.07	.15	.19	.30	.35	.01	.41	.08
25	.13	.35	.13	.22	.06	.17	.32	.04	.51	.16	.31	.47
26	.08	.31	.08	.20	.10	.15	.24	.22	.31	.12	.23	.20
27	.18	.39	.21	.27	.09	.29	.38	.37	.27	.14	.37	.24
28	-.03	.36	.20	.41	.07	.45	.30	.37	.35	.16	.54	.31
29	-.03	-.04	.24	.19	.03	.21	.18	-.07	-.13	.03	.03	.03
30	.03	.10	.31	.50	.11	.44	.16	.32	.14	.07	.45	.00
31	.15	.16	.25	.28	.08	.31	.41	.31	.14	.06	.36	.19
32	.10	.21	-.03	.05	-.12	-.07	.20	.02	.27	-.22	.12	.13
33	.05	.16	.22	.29	.14	.25	.29	.13	.33	.21	.32	.24
34	.02	.17	-.01	.15	-.02	.02	.19	.19	.30	.03	.30	.10
35	.25	.25	.15	.23	.13	.24	.32	.11	.24	.26	.19	.20
36	.09	.20	.01	.22	.54	.42	.24	.10	.18	.63	.12	.50
37	.18	.43	.21	.20	.09	.18	.30	.27	.44	.21	.39	.32

(Table B-4 continued)

Item	13	14	15	16	17	18	19	20	21	22	23	24
14	.11	--										
15	.22	.22	--									
16	.14	.21	.34	--								
17	.38	.20	.31	.21	--							
18	.05	.49	.37	.37	.43	--						
19	.05	.46	.29	.36	.23	.48	--					
20	.07	.25	.27	.15	.24	.30	.18	--				
21	.11	.21	.18	.25	.15	.25	.34	.08	--			
22	-.13	.20	.29	.38	.11	.49	.53	.26	.31	--		
23	.24	.22	.16	.33	.26	.33	.12	.09	.13	.21	--	
24	.34	.25	.19	.17	.52	.33	.22	.24	.27	.15	.28	--
25	.38	.13	.12	.36	.37	.23	.15	.21	.29	.18	.34	.22
26	.01	.23	.17	.26	.34	.37	.15	.31	.04	.28	.35	.45
27	.25	.35	.19	.33	.25	.28	.22	.08	.20	.23	.37	.29
28	.11	.29	.29	.29	.33	.43	.32	.15	.27	.35	.17	.35
29	.05	.33	.02	-.02	.27	.12	.20	.13	.05	-.01	-.01	.10
30	.07	.53	.13	.18	.34	.54	.36	.28	.22	.40	.27	.38
31	.37	.47	.48	.28	.37	.43	.27	.33	.19	.25	.24	.37
32	.26	.12	.09	.08	.40	.28	-.06	.27	.03	.10	.29	.46
33	.31	.25	.21	.24	.35	.40	.25	.20	.39	.21	.30	.24
34	.05	.11	.26	.17	.33	.29	.09	.25	.00	.10	.20	.44
35	.04	.33	.15	.28	.29	.40	.20	.27	.14	.23	.30	.33
36	.03	.18	.28	.52	.07	.28	.34	.17	.55	.35	.01	.11
37	.29	.27	.29	.23	.39	.38	.20	.22	.14	.11	.30	.43

Item	25	26	27	28	29	30	31	32	33	34	35	36
26	.34	--										
27	.49	.36	--									
28	.33	.29	.58	--								
29	.05	.00	.06	.12	--							
30	.17	.38	.32	.38	.27	--						
31	.24	.23	.37	.46	.29	.41	--					
32	.33	.52	.24	.17	.14	.25	.37	--				
33	.56	.23	.51	.47	.16	.39	.32	.15	--			
34	.22	.52	.18	.23	-.05	.31	.26	.44	.24	--		
35	.26	.29	.37	.22	.14	.33	.32	.35	.23	.34	--	
36	.32	.16	.20	.24	-.01	.11	.17	-.01	.27	.03	.30	--
37	.44	.36	.52	.42	.13	.25	.33	.28	.49	.28	.31	.16

Table B-5

Intercorrelations Between Orientation Items for Group 4: Anglophones Learn Spanish in a Multicultural Milieu

Item	1	2	3	4	5	6	7	8	9	10	11	12
2	.27	--										
3	.29	.28	--									
4	.23	.36	.49	--								
5	.13	.23	.19	.11	--							
6	.16	.31	.46	.63	.24	--						
7	.11	.16	.31	.37	.19	.50	--					
8	.10	.41	.27	.16	.39	.23	.13	--				
9	.28	.56	.14	.25	.04	.03	.03	.24	--			
10	.22	.20	.15	.17	.77	.19	.14	.27	.03	--		
11	.15	.43	.23	.43	.35	.33	.06	.46	.22	.26	--	
12	.29	.17	.23	.21	.45	.19	.37	.22	.12	.49	.26	--
13	.26	.34	.10	.12	.11	.06	-.01	.21	.28	.11	.48	.12
14	.17	.24	.71	.64	.16	.61	.37	.20	.08	.20	.19	.13
15	.11	.29	.19	.22	.08	.05	.13	.34	.33	.04	.32	.10
16	.27	.35	.34	.35	.49	.24	.46	.33	.17	.50	.26	.85
17	.06	.04	.16	.23	.32	-.05	-.03	.02	.22	.25	.28	.33
18	.18	.12	.32	.44	.21	.41	.17	.09	.13	.19	.36	.29
19	.26	.21	.45	.64	.29	.72	.43	.30	.20	.27	.33	.28
20	.28	-.13	.06	.23	-.02	.11	.18	-.10	.03	.04	.19	.19
21	.23	.35	.31	.34	.49	.31	.11	.38	.16	.50	.57	.21
22	.20	.18	.45	.60	.35	.70	.45	.19	.04	.36	.22	.49
23	.27	.26	-.03	.17	.12	.07	.28	.10	.25	.08	.20	.44
24	.05	.14	-.02	.02	.12	.00	.09	.01	.10	.01	.22	.07
25	.31	.25	.16	.12	.17	.13	.32	.12	.10	.15	.18	.60
26	.29	.10	.24	.30	.07	.23	.30	-.14	.18	.12	.12	.13
27	.19	.31	.21	.25	.18	.17	.34	.30	.18	.11	.37	.46
28	.26	.47	.19	.44	.23	.12	.17	.28	.52	.18	.52	.15
29	.28	.09	.26	.31	.06	.26	.13	-.02	.21	.18	.13	.10
30	.38	.19	.44	.56	.18	.53	.16	.12	.16	.14	.38	.23
31	.34	.30	.22	.35	.19	.19	.26	.26	.38	.21	.36	.31
32	.22	-.02	.09	.10	.19	.13	.21	-.03	.17	.09	.16	.21
33	.35	.44	.31	.37	.24	.37	.29	.36	.21	.15	.53	.34
34	.40	.27	.36	.39	.21	.24	.11	.18	.19	.21	.32	.29
35	.10	.31	.20	.23	.15	.25	.30	.16	.42	.14	.10	.22
36	.17	.29	.12	.25	.64	.26	.27	.18	.10	.81	.31	.56
37	.04	.54	.10	.19	.12	.11	.25	.16	.34	.24	.28	.25

(Table B-5 continued)

Item	13	14	15	16	17	18	19	20	21	22	23	24
14	.01	--										
15	.18	.07	--									
16	.18	.28	.09	--								
17	.22	.15	.08	.32	--							
18	.15	.44	.03	.29	.39	--						
19	.00	.60	.26	.35	.10	.37	--					
20	.23	.22	-.01	.17	.13	.12	.18	--				
21	.33	.23	.13	.26	.14	.18	.34	.10	--			
22	-.05	.53	.03	.46	.17	.42	.68	.03	.27	--		
23	.36	-.02	.03	.43	.26	.23	.07	.17	.09	.12	--	
24	.24	.02	-.09	.10	.47	.19	.02	.24	.21	-.12	.38	--
25	.27	.11	-.04	.61	.38	.20	.13	.18	.13	.34	.54	.34
26	.15	.31	.08	.16	.36	.41	.28	.38	.06	.24	.27	.34
27	.34	.02	.13	.50	.29	.20	.20	.05	.21	.22	.35	.21
28	.37	.11	.38	.24	.30	.20	.35	.14	.38	.18	.20	.13
29	.12	.31	.12	.12	.13	.36	.31	.39	.20	.18	.07	.02
30	.32	.57	.02	.28	.33	.60	.52	.42	.32	.46	.24	.19
31	.38	.21	.32	.42	.35	.21	.36	.39	.18	.20	.30	.26
32	.14	.15	.04	.16	.28	.25	.09	.41	.13	.09	.19	.21
33	.29	.24	.32	.42	.20	.10	.43	.17	.38	.31	.10	.24
34	.14	.35	.01	.40	.38	.41	.32	.12	.28	.31	.20	.24
35	.13	.21	.08	.30	.16	.21	.27	.19	.17	.13	.39	.17
36	.13	.20	-.05	.59	.20	.24	.33	.10	.43	.47	.08	.04
37	.31	.06	.17	.39	.15	.05	.07	.06	.28	.06	.29	.21

Item	25	26	27	28	29	30	31	32	33	34	35	36
26	.32	--										
27	.49	.12	--									
28	.09	.13	.44	--								
29	-.07	.35	-.03	.23	--							
30	.23	.43	.19	.25	.56	--						
31	.40	.34	.46	.49	.25	.37	--					
32	.18	.50	.13	.06	.32	.41	.40	--				
33	.35	.02	.42	.46	.10	.23	.38	.01	--			
34	.27	.34	.18	.23	.28	.39	.32	.33	.33	--		
35	.13	.21	.22	.28	.35	.25	.39	.35	.05	.23	--	
36	.27	.07	.22	.24	.20	.18	.32	.06	.26	.24	.22	--
37	.39	.20	.43	.35	.01	.03	.31	.01	.28	.10	.34	.31

Table B-6

Intercorrelations Between Orientation Items for Group 5: Francophones Learn English in a Unicultural Milieu

Item	1	2	3	4	5	6	7	8	9	10	11	12
2	.20	--										
3	.13	.19	--									
4	.13	.20	.47	--								
5	.19	.14	.17	.24	--							
6	-.02	.19	.40	.40	.14	--						
7	-.09	.13	-.08	.05	-.01	.08	--					
8	.23	.17	.20	.13	.21	.11	.04	--				
9	.23	.61	.22	.23	.20	.09	.13	.18	--			
10	.20	.25	.08	.21	.36	.18	.15	.06	.22	--		
11	.16	.34	.18	.31	.34	.08	-.10	.24	.37	.16	--	
12	.26	.33	.11	.32	.25	.10	.14	.07	.39	.28	.21	--
13	.01	.46	.11	.14	.01	-.06	.11	.08	.41	.00	.26	.33
14	.04	.05	.31	.22	.24	.27	.15	.09	-.03	.20	.02	-.06
15	.05	.33	.09	.02	.11	-.07	.11	.14	.36	-.06	.15	.12
16	.30	.32	.23	.20	.50	.05	.02	.11	.47	.34	.26	.58
17	.18	.15	.13	.13	.21	.15	.06	.17	.14	.09	.31	.14
18	.20	.23	.27	.27	.17	.31	.07	.17	.25	.16	.26	.33
19	.24	.31	.30	.36	.16	.19	-.13	.16	.34	.08	.37	.38
20	.06	.19	.12	.12	.11	.03	.14	.08	.21	.04	.18	.10
21	.28	.21	.30	.32	.38	.19	-.21	.26	.21	.23	.38	.30
22	.26	.18	.16	.20	.25	.12	.17	.13	.33	.32	.24	.46
23	.35	.28	.20	.19	.41	.06	.07	.21	.45	.26	.25	.50
24	.03	.45	.10	.25	.12	.04	.02	.06	.37	.10	.33	.26
25	.29	.44	.23	.31	.21	.00	.03	.13	.53	.25	.42	.51
26	.20	.30	.22	.14	.22	.08	.02	.24	.31	.08	.35	.19
27	.10	.28	.13	.21	.10	-.11	.06	.13	.31	.02	.28	.30
28	.11	.35	.17	.19	.06	.06	.00	.10	.32	-.02	.40	.14
29	.12	.18	.12	.10	.30	.14	.10	.14	.06	.08	.16	.09
30	.10	.10	.22	.40	.16	.33	.13	.06	.14	.12	.20	.09
31	.12	.35	.13	.13	.22	-.02	.12	.08	.33	-.04	.23	.17
32	-.10	.19	-.13	-.09	-.04	.06	.11	.11	.16	.11	.00	.00
33	.19	.07	.37	.19	.20	.11	-.26	.18	.31	.02	.20	.21
34	.06	-.10	-.02	.04	.14	.00	-.04	.00	.00	.11	.07	.02
35	.23	.24	.07	.25	.20	-.01	.01	.18	.35	.15	.26	.25
36	.19	.24	.07	.24	.41	.08	.06	.07	.17	.43	.25	.27
37	.07	.23	.10	.03	.11	-.06	-.02	.20	.23	.06	.05	.32

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(Table B-6 continued)

Item	13	14	15	16	17	18	19	20	21	22	23	24
14	.07	--										
15	.21	.05	--									
16	.26	.09	.34	--								
17	.18	.21	.19	.17	--							
18	.15	.18	.13	.35	.37	--						
19	.27	.07	.21	.35	.19	.49	--					
20	.22	.22	.25	.13	.51	.36	.17	--				
21	.12	.05	.03	.32	.03	.13	.34	-.03	--			
22	.19	.10	.18	.46	.09	.32	.29	.25	.32	--		
23	.21	.15	.13	.65	.17	.32	.21	.13	.33	.41	--	
24	.36	.09	.23	.19	.46	.29	.32	.39	.11	.12	.10	--
25	.35	.00	.23	.53	.10	.29	.29	.10	.17	.31	.50	.29
26	.31	.10	.33	.26	.44	.30	.26	.34	.14	.09	.25	.30
27	.27	.07	.24	.27	.08	.25	.28	.18	.21	.20	.36	.22
28	.29	.12	.31	.16	.24	.21	.34	.19	.20	.20	.11	.23
29	.08	.31	.07	.20	.20	.15	.22	.13	.23	.01	.20	.13
30	.02	.33	.07	.07	.19	.33	.25	.05	.20	.13	.08	.36
31	.31	.06	.33	.17	.08	.17	.24	.26	.06	.15	.17	.22
32	.17	-.05	.12	.05	.18	.07	-.05	-.03	-.02	-.12	.12	.21
33	.08	.12	.01	.31	.05	.23	.35	-.07	.32	.10	.39	.06
34	.17	.16	-.01	.10	.21	.14	.06	.09	.16	.08	.15	.13
35	.25	.00	.10	.21	.34	.21	.23	.33	.22	.25	.25	.35
36	-.05	.11	.11	.41	.05	.13	.28	.05	.46	.35	.39	.14
37	.28	-.05	.16	.36	.19	.13	.13	.19	.27	.19	.29	.29

Item	25	26	27	28	29	30	31	32	33	34	35	36
26	.25	--										
27	.33	.35	--									
28	.25	.31	.44	--								
29	.10	.08	.03	.14	--							
30	.16	.12	.16	.24	.20	--						
31	.26	.33	.30	.28	.15	.24	--					
32	-.02	.25	.06	.10	.13	.13	.08	--				
33	.32	.13	.29	.17	.00	.18	.02	.01	--			
34	.04	.28	.21	.09	.12	-.03	-.05	.09	.17	--		
35	.10	.18	.08	.18	.07	.21	.26	.08	.11	.00	--	
36	.22	.18	.27	.13	.23	.25	.10	.00	.23	.13	.16	--
37	.34	.13	.35	.20	-.02	.03	.04	.09	.32	.13	.13	.21

Table B-7

Intercorrelations Between Orientation Items for Group 6: Francophones Learn English in a Multicultural Milieu

Item	1	2	3	4	5	6	7	8	9	10	11	12
2	.28	--										
3	.21	.14	--									
4	-.02	-.02	.37	--								
5	.26	.28	.08	.11	--							
6	.33	.11	.30	.26	.38	--						
7	.00	.09	-.06	.03	.18	.08	--					
8	.20	.26	.24	-.04	.25	.26	.04	--				
9	.23	.49	.09	-.04	.38	.13	.30	.33	--			
10	.15	.25	-.05	.06	.41	.08	.32	.17	.31	--		
11	.17	.18	.25	.10	.12	.21	.04	.25	.25	.12	--	
12	.39	.24	.09	.13	.25	.26	.29	.36	.42	.41	.30	--
13	.08	.21	.18	.10	.13	.03	.12	.38	.45	.15	.21	.43
14	.17	.13	.36	.36	.18	.19	.07	.11	.12	.00	.11	.14
15	.19	.23	.14	-.08	.16	.07	.29	.33	.43	.21	.20	.41
16	.33	.23	.03	-.01	.29	.23	.19	.31	.30	.40	.10	.58
17	.21	.16	.25	.15	.19	.23	.14	.29	.33	.13	.25	.30
18	.24	.08	.31	.30	.24	.60	.13	.14	.10	.08	.18	.21
19	.22	.21	.42	.29	.21	.54	.15	.23	.15	.12	.34	.24
20	.20	.17	.23	.07	.17	.16	.26	.14	.29	.20	.02	.18
21	.42	.18	.11	.00	.45	.24	.12	.27	.25	.37	.12	.35
22	.08	.12	-.05	.03	.29	.12	.44	.16	.31	.41	.11	.44
23	.27	.02	.13	.01	.14	.20	.24	.16	.20	.24	.11	.32
24	.15	.21	.11	-.05	.05	-.04	.20	.25	.19	.16	.20	.16
25	.28	.23	.04	.02	.30	.14	.22	.26	.43	.43	.23	.45
26	.09	.09	.15	.08	.23	.17	.28	.19	.28	.33	.35	.26
27	.12	.15	.20	-.06	.09	.16	.04	.32	.21	.24	.22	.24
28	.28	.24	.14	-.04	.23	.06	.13	.23	.28	.24	.33	.29
29	.16	.06	.29	.35	.12	.16	.15	.16	.20	.04	.08	.28
30	.08	-.03	.09	.12	.04	.22	.06	.17	.05	-.05	.01	.05
31	.07	.31	.26	-.01	.28	.11	.32	.31	.49	.31	.31	.32
32	.09	.01	.00	-.04	.06	.01	.00	.20	.10	-.01	-.07	.10
33	.13	.16	.17	-.04	.11	.18	.08	.25	.29	.06	.21	.19
34	.20	-.04	.07	.15	.19	.23	.12	.15	.18	.14	.07	.30
35	.10	.12	.15	-.01	.27	.14	.40	.18	.44	.28	.10	.39
36	.19	.16	-.05	-.09	.48	.12	.29	.28	.36	.60	.00	.40
37	.09	.14	.23	.12	.15	.15	.08	.26	.31	.18	.15	.25

(Table B-7 continued)

Item	13	14	15	16	17	18	19	20	21	22	23	24
14	.14	--										
15	.34	-.09	--									
16	.27	.11	.25	--								
17	.33	.21	.21	.27	--							
18	-.02	.30	.06	.20	.27	--						
19	.06	.37	.10	.14	.23	.65	--					
20	.15	.17	.20	.21	.44	.17	.23	--				
21	.11	.26	.15	.44	.12	.13	.22	.16	--			
22	.17	.13	.31	.34	.20	.16	.20	.27	.35	--		
23	.17	.04	.21	.48	.24	.24	.19	.22	.32	.34	--	
24	.18	.05	.22	.21	.38	.13	.16	.34	.10	.18	.15	--
25	.34	-.04	.36	.42	.07	.07	.09	.21	.31	.40	.43	.24
26	.15	.07	.32	.35	.32	.22	.20	.29	.29	.42	.29	.33
27	.17	-.01	.24	.25	.26	.15	.18	.21	.21	.27	.40	.34
28	.22	.00	.25	.31	.34	.06	.18	.21	.33	.39	.40	.29
29	.18	.55	.04	.11	.16	.22	.26	.22	.13	.18	.02	.07
30	.01	.19	.18	.05	.15	.38	.36	.21	.15	.26	.26	.25
31	.33	.00	.54	.25	.35	.09	.18	.30	.21	.40	.30	.32
32	.18	-.11	.16	.02	.18	.02	.03	.05	-.03	.11	.08	.21
33	.11	.05	.13	.09	.15	.13	.25	.04	.09	.16	.27	.06
34	.11	.10	.03	.33	.21	.20	.23	.07	.32	.19	.30	.20
35	.39	.06	.41	.26	.27	.11	.15	.25	.19	.42	.28	.22
36	.19	.04	.21	.41	.14	.06	-.04	.21	.46	.48	.34	.20
37	.28	.08	.22	.25	.15	.06	.11	.12	.39	.26	.31	.16

Item	25	26	27	28	29	30	31	32	33	34	35	36
26	.41	--										
27	.33	.44	--									
28	.50	.37	.36	--								
29	.13	.24	-.02	.00	--							
30	.16	.30	.34	.10	.19	--						
31	.51	.44	.41	.46	.07	.12	--					
32	.03	.16	.22	.02	-.04	.25	.14	--				
33	.19	.17	.24	.38	.01	.24	.33	.08	--			
34	.26	.29	.21	.16	.24	.16	.06	-.01	.13	--		
35	.40	.31	.25	.30	.09	.06	.48	.30	.17	.11	--	
36	.50	.38	.30	.41	.04	.04	.33	.13	.10	.30	.39	--
37	.32	.24	.16	.32	.23	.14	.25	-.05	.22	.31	.14	.28

Table B-8

Intercorrelations Between Orientation Items for Group 7: Francophones Learn Spanish in a Unicultural Milieu

Item	1	2	3	4	5	6	7	8	9	10	11	12
2	.52	--										
3	.13	-.08	--									
4	.31	.15	.66	--								
5	.44	.24	.25	.21	--							
6	.24	.15	.71	.71	.23	--						
7	.02	.17	.02	.05	.07	.06	--					
8	.25	.19	.17	.06	.42	.12	.24	--				
9	.42	.60	-.03	.10	.39	.03	.15	.37	--			
10	.22	.16	-.03	-.11	.51	-.08	.24	.43	.34	--		
11	.29	.30	.02	.06	.35	-.02	.10	.47	.32	.53	--	
12	.44	.40	.07	.12	.54	.06	.23	.40	.44	.53	.54	--
13	.31	.36	.05	.17	.31	.17	.29	.27	.37	.19	.27	.54
14	.12	.02	.45	.42	.07	.43	.13	.14	-.05	-.07	.01	.05
15	.25	.40	.01	.17	.24	.17	.15	.20	.33	.08	.20	.29
16	.39	.42	.10	.16	.53	.22	.26	.47	.50	.34	.37	.65
17	.32	.26	.28	.30	.21	.30	.23	.20	.17	.07	.27	.19
18	.22	.16	.50	.62	.21	.58	.13	.28	.17	.03	.13	.12
19	.35	.04	.66	.66	.37	.61	.01	.24	.08	-.02	.08	.16
20	-.13	-.10	.06	.17	.01	.06	.02	.02	.06	-.04	-.05	.00
21	.45	.36	.15	.12	.64	.14	.08	.57	.53	.45	.47	.53
22	.25	.11	.56	.57	.35	.67	.06	.39	.15	.05	.06	.32
23	.33	.30	.05	.11	.46	.03	.19	.49	.40	.37	.45	.49
24	.15	.33	.10	.19	.12	.16	.36	.23	.19	-.07	.16	.19
25	.28	.54	.12	.26	.34	.20	.16	.32	.52	.22	.46	.40
26	.05	.20	.02	.12	.11	.15	.45	.24	.17	.03	.19	.09
27	.29	.37	.15	.21	.22	.15	.27	.42	.35	.18	.25	.31
28	.23	.22	.05	.05	.25	.12	.12	.43	.32	.21	.38	.30
29	.10	-.01	.52	.42	.09	.47	.17	.23	-.02	.00	-.13	.00
30	.09	-.03	.59	.63	.21	.60	.20	.11	.00	-.06	-.06	.02
31	-.01	.06	.22	.21	.09	.13	.21	.29	.09	.18	.25	.13
32	-.33	-.22	.02	-.01	.06	-.14	.12	.00	-.06	-.01	-.05	.00
33	.36	.29	.21	.18	.47	.26	.15	.52	.38	.28	.33	.36
34	.16	.16	.12	.13	.08	.12	.31	.13	.08	.05	.23	.21
35	.07	.19	.06	.07	.05	.08	.46	.21	.04	.08	.20	.30
36	.46	.34	.19	.18	.63	.20	-.05	.45	.36	.36	.35	.46
37	.22	.34	.07	.12	.27	.06	.18	.30	.34	.17	.29	.24

(Table B-8 continued)

Item	13	14	15	16	17	18	19	20	21	22	23	24
14	.18	--										
15	.46	.04	--									
16	.50	.12	.43	--								
17	.23	.30	.17	.25	--							
18	.17	.30	.21	.26	.21	--						
19	.09	.38	.05	.24	.28	.60	--					
20	.16	.19	-.10	.11	.21	.06	.10	--				
21	.23	.07	.19	.51	.26	.26	.27	-.09	--			
22	.28	.48	.19	.40	.36	.52	.55	.12	.43	--		
23	.36	.07	.27	.64	.30	.16	.24	.13	.63	.37	--	
24	.32	.05	.18	.28	.55	.27	.18	.14	.15	.26	.27	--
25	.45	.19	.38	.59	.28	.23	.10	.14	.47	.34	.57	.38
26	.35	.15	.09	.26	.34	.41	.13	.16	.20	.23	.30	.58
27	.35	.15	.14	.51	.17	.29	.20	.18	.37	.31	.45	.43
28	.34	.09	.26	.52	.25	.22	.16	-.03	.46	.37	.51	.31
29	.03	.59	-.03	.15	.22	.39	.39	.12	.10	.40	.04	.19
30	.05	.47	-.03	.20	.31	.43	.55	.10	.13	.57	.13	.24
31	.26	.36	.08	.20	.23	.19	.14	.12	.07	.30	.20	.22
32	.02	.05	-.04	-.07	-.09	.05	-.07	.29	-.05	.00	-.02	.10
33	.24	.19	.16	.47	.31	.26	.30	.07	.69	.53	.58	.34
34	.36	.11	.12	.18	.20	.32	.15	.01	.05	.02	.12	.36
35	.29	.18	.13	.41	.18	.16	.03	-.01	.18	.17	.24	.20
36	.28	.10	.16	.44	.27	.17	.29	.05	.66	.38	.42	.13
37	.24	.25	.40	.40	.17	.27	.06	-.01	.35	.14	.22	.24

Item	25	26	27	28	29	30	31	32	33	34	35	36
26	.37	--										
27	.59	.40	--									
28	.51	.27	.53	--								
29	.12	.18	.29	-.02	--							
30	.19	.18	.25	.14	.53	--						
31	.26	.19	.35	.38	.13	.28	--					
32	.04	.17	-.05	-.25	.07	.02	.07	--				
33	.49	.30	.59	.56	.29	.31	.26	.00	--			
34	.18	.44	.31	.31	.06	.05	.19	-.17	.09	--		
35	.28	.34	.32	.20	.08	.12	.31	-.05	.16	.31	--	
36	.35	.18	.30	.19	.18	.18	.02	-.02	.50	.02	.13	--
37	.54	.25	.43	.50	.06	-.01	.40	.06	.33	.30	.30	.26

Table B-9

Intercorrelations Between Orientation Items for Group 8: Francophones Learn Spanish in a Multicultural Milieu

Item	1	2	3	4	5	6	7	8	9	10	11	12
2	.21	--										
3	.04	-.07	--									
4	.12	.15	.31	--								
5	.21	.24	.13	.46	--							
6	.25	.12	.32	.62	.36	--						
7	.20	.11	.10	-.13	.16	.11	--					
8	.21	.07	.23	.16	.04	.29	-.10	--				
9	.21	.41	-.08	.00	.16	.03	.27	-.02	--			
10	.30	.13	.07	.25	.56	.17	.15	.00	.20	--		
11	.00	.07	.05	.36	.06	.39	-.09	.19	-.10	.05	--	
12	.20	-.06	.19	.19	.38	.23	.25	.03	.12	.37	-.01	--
13	.12	.13	.13	.03	.05	.08	.28	-.10	.17	.07	.14	.17
14	.19	.10	.24	.11	.08	.29	.12	.13	-.04	-.05	.17	.12
15	.00	-.04	-.01	.06	.01	-.15	.06	.05	.01	.01	.26	-.01
16	.19	.00	.21	.07	.34	.11	.31	.18	.12	.33	-.01	.66
17	.07	-.11	.13	-.02	-.13	-.01	-.04	.07	-.26	.04	.44	.10
18	.05	.17	.08	.35	.00	.39	.04	.17	-.04	-.02	.28	.03
19	.25	.17	.25	.47	.22	.43	.01	.11	.07	.02	.31	.13
20	.17	.02	.08	-.20	-.03	-.09	.27	-.03	.01	.13	.06	.11
21	.20	.00	.03	.30	.40	.18	-.11	.07	.02	.39	.11	.34
22	.15	.12	.35	.28	.34	.50	.34	.08	.13	.16	.01	.36
23	.11	.00	.18	.16	.24	.12	.10	.06	.01	.25	-.02	.56
24	.11	.03	.10	-.06	-.08	-.02	.08	.17	-.07	.05	.31	.08
25	.11	.25	-.04	.14	.26	.14	.14	-.11	.28	.20	.04	.40
26	.18	-.05	-.03	.09	.00	.11	.17	.06	.16	.01	.26	.19
27	.09	.10	-.13	.09	.14	.15	.12	.27	.09	.02	.11	.01
28	.09	.33	-.13	.09	.11	.11	.05	.10	.22	-.02	.50	-.10
29	.14	.10	.06	.08	.04	.06	.20	-.05	.02	-.02	.13	.07
30	.19	.17	.34	.48	.20	.44	.05	.21	.03	.18	.38	.12
31	.03	.13	-.07	.12	.04	.04	.11	.08	.12	.01	.31	.02
32	.10	.23	.05	-.20	.13	-.24	.26	-.18	.11	.16	-.09	.04
33	.11	.02	.08	.07	.13	.21	.04	.17	.05	.04	.15	.15
34	.05	.09	.05	.14	.18	.13	.14	.18	.19	.11	.14	.16
35	.08	.02	-.06	.07	.22	.08	.25	-.01	.19	.29	.11	.21
36	.25	.06	-.02	.14	.45	.13	.13	-.03	.11	.44	-.13	.46
37	.15	.18	-.03	-.04	-.04	.12	.05	.16	.22	.04	.16	.03

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(Table B-9 continued)

Item	13	14	15	16	17	18	19	20	21	22	23	24
14	.12	--										
15	.19	.02	--									
16	.21	.20	.15	--								
17	.08	.25	.37	.16	--							
18	.13	.31	.10	.17	.24	--						
19	.18	.22	.06	.13	.20	.49	--					
20	.26	.18	-.05	.24	.25	.13	-.08	--				
21	-.03	-.15	.22	.20	.14	-.03	.10	-.05	--			
22	.13	.17	-.15	.40	-.05	.21	.44	.07	.11	--		
23	.19	.06	.00	.44	.17	-.06	-.02	.14	.23	.26	--	
24	.09	.18	.28	.16	.68	.24	.14	.23	.00	-.06	.07	--
25	.18	.01	.06	.29	.12	.03	.15	-.04	.22	.31	.50	.05
26	.27	.07	.24	.09	.37	.27	.28	.17	.02	.00	.17	.46
27	.16	-.04	.36	.15	.09	.20	-.03	.04	.11	.10	.30	.11
28	.07	.14	.32	-.04	.21	.21	.27	-.02	.03	.04	-.06	.11
29	.18	.60	.28	.13	.30	.23	.18	.08	.02	-.01	.08	.26
30	.11	.31	.10	.10	.25	.57	.37	-.04	.08	.25	.16	.24
31	.07	.19	.34	.12	.27	.35	.23	.04	-.06	-.04	.05	.37
32	.25	.05	.01	.08	.06	-.01	-.14	.55	.04	-.04	.05	.08
33	-.09	-.05	.20	.11	.18	.00	.22	-.02	.34	.20	.24	-.05
34	.17	-.10	.29	.18	.09	.09	-.02	.02	.02	.15	.27	.11
35	.33	-.05	.27	.29	.12	-.02	.06	.12	.09	.18	.29	.12
36	-.16	-.05	-.06	.27	-.04	-.17	.09	-.02	.52	.26	.34	-.16
37	.09	.06	.18	.01	.06	.07	.00	.02	.01	.04	.11	.05

Item	25	26	27	28	29	30	31	32	33	34	35	36
26	.17	--										
27	.25	.33	--									
28	.21	.16	.17	--								
29	.08	.30	.12	.22	--							
30	.12	.30	.18	.23	.26	--						
31	.07	.42	.23	.43	.29	.46	--					
32	.03	.09	-.03	.09	-.01	-.07	-.11	--				
33	.23	.04	.30	.37	-.02	.00	.13	-.07	--			
34	.17	.25	.42	.17	-.06	.13	.13	.07	.26	--		
35	.19	.30	.33	.14	.20	-.05	.12	-.01	.08	.31	--	
36	.31	.00	-.07	-.04	.01	.06	-.07	.01	.38	.05	.18	--
37	.03	.13	.19	.24	.21	.05	.28	.00	.31	.33	.19	-.02

Table B-10

Intercorrelations Between Orientations in Eight Groups

Item	1	2	3	4	5	6	7	8	9	10	11	12
2	.00	--										
3	.00	.00	--									
4	.00	.00	.00	--								
5	.00	.00	.00	.00	--							
6	.00	.00	.00	.00	.00	--						
7	.08	-.13	-.54	.44	-.53	-.31	--					
8	-.46	.83	.02	-.33	-.06	.22	.00	--				
9	.51	-.27	-.17	.19	.23	-.18	.00	.00	--			
10	-.21	.05	.83	-.12	.38	-.17	.00	.00	.00	--		
11	-.17	.18	-.20	.00	-.06	.52	.00	.00	.00	.00	--	
12	.39	-.27	.21	-.09	.48	-.45	.00	.00	.00	.00	.00	--
13	.11	-.13	.52	.00	.74	-.42	-.44	-.07	-.01	.55	-.35	.57
14	-.58	.73	-.23	-.35	-.18	.63	-.22	.65	-.24	-.15	.42	-.43
15	.67	-.36	-.07	-.32	-.14	-.21	.03	-.29	.22	-.17	-.11	.46
16	.11	.06	-.41	.37	-.37	-.39	.77	-.10	.12	-.35	-.30	-.08
17	.00	.08	.11	.11	.36	.00	-.29	.07	.38	.07	.09	-.09
18	-.07	-.18	-.06	.53	-.11	-.07	.36	-.22	.00	-.06	.15	-.15
19	-.53	.77	.01	-.47	-.06	.36	-.32	.86	-.41	.04	.22	-.11
20	-.05	.12	-.57	.21	-.50	-.05	.71	-.11	-.08	-.42	-.24	-.35
21	.34	-.24	.16	.19	.66	-.42	-.08	-.21	.34	.17	-.33	.60
22	.61	-.40	-.09	-.17	.01	-.05	-.10	-.26	.39	-.16	.19	.29
23	-.20	-.06	.74	-.10	.26	-.09	-.40	-.12	-.27	.76	-.19	.00
24	-.04	.03	.06	.31	.28	-.04	-.20	-.04	.40	-.05	.34	-.25
25	.07	-.28	.53	.06	.49	-.33	-.29	-.24	-.02	.66	-.34	.29
26	.63	-.55	.05	-.07	.17	-.02	-.20	-.40	.35	-.12	.12	.36
27	.20	-.01	-.32	.56	-.11	-.29	.50	-.14	.35	-.30	.08	-.20
28	.22	-.15	.47	-.12	-.11	-.33	.06	-.11	-.20	.41	-.45	.23
29	-.45	.62	-.03	-.09	-.03	.13	-.18	.69	-.32	-.04	.24	-.09
30	-.39	.31	-.36	-.31	-.23	.75	-.13	.30	-.22	-.30	.20	-.32
31	-.09	-.12	.68	-.10	.53	-.27	-.43	-.08	-.08	.80	-.51	.21
32	-.48	.83	-.09	-.30	.05	.31	-.33	.87	-.32	-.07	.37	-.14
33	-.06	-.01	-.23	.63	-.20	.08	.41	-.10	.11	-.31	.13	-.33
34	.31	-.28	-.19	.35	.14	-.34	.23	-.25	.40	-.20	.02	.07
35	.23	-.28	-.15	-.17	-.14	-.09	.24	-.30	-.17	-.18	-.31	.40
36	.37	-.01	-.01	-.25	-.30	-.10	.01	-.04	.20	-.09	.04	.01
37	.57	-.28	-.23	.14	-.07	-.27	.20	-.30	.41	-.28	-.01	.27
38	.30	-.27	.24	.08	.70	-.33	-.29	-.19	.22	.25	-.32	.60
39	-.53	.72	-.07	-.36	-.01	.48	-.35	.80	-.22	-.03	.32	-.24
40	-.31	.05	.61	-.06	.24	-.02	-.35	.00	-.36	.78	-.17	-.15
41	-.15	-.05	-.15	.45	-.30	-.04	.53	-.14	-.15	-.28	.01	-.20
42	-.05	.00	-.11	.26	.30	.01	-.09	-.04	.43	-.01	.17	-.30
43	.12	-.33	.63	.15	.65	-.28	-.47	-.32	.15	.60	-.14	.21
44	-.53	.77	-.17	-.37	-.15	.50	-.26	.84	-.33	-.10	.22	-.30
45	.38	-.31	-.35	.40	-.11	-.31	.56	-.36	.36	-.37	-.05	.10
46	.39	-.22	.10	-.10	.31	-.25	-.26	-.19	.23	.05	-.12	.58
47	.25	-.03	.06	.19	.30	-.10	-.21	.08	.38	-.05	.22	.09
48	.08	.03	-.05	.28	-.22	-.04	.19	-.03	.36	-.05	.06	-.38

(Table B-10 continued)

Item	13	14	15	16	17	18	19	20	21	22	23	24
14	.00	--										
15	.00	.00	--									
16	.00	.00	.00	--								
17	.00	.00	.00	.00	--							
18	.00	.00	.00	.00	.00	--						
19	-.07	.73	-.27	-.19	-.01	-.33	--					
20	-.44	.10	-.09	.69	-.19	.15	.00	--				
21	.70	-.39	.07	.03	-.04	.02	.00	.00	--			
22	-.16	-.30	.60	-.21	.24	-.13	.00	.00	.00	--		
23	.47	-.12	-.18	-.27	.00	-.17	.00	.00	.00	.00	--	
24	-.03	.01	-.12	-.22	.52	.10	.00	.00	.00	.00	.00	--
25	.68	-.35	-.18	-.12	.16	-.16	-.24	-.30	.42	-.05	.55	-.06
26	-.02	-.41	.61	-.24	.09	.04	-.43	-.31	.06	.65	-.10	.30
27	-.19	-.15	-.09	.37	.00	.42	-.28	.34	.19	.03	-.37	.11
28	.17	-.41	.41	-.03	-.37	.05	-.09	-.05	.17	-.03	.31	-.46
29	-.06	.55	-.30	.06	.07	-.19	.62	.01	-.21	-.32	-.09	.04
30	-.37	.57	-.18	-.03	.00	-.19	.42	.24	-.33	-.22	-.21	-.22
31	.72	-.18	-.22	-.23	.05	-.20	-.06	-.34	.38	-.21	.65	-.10
32	-.05	.76	-.31	-.10	.08	-.25	.81	-.07	-.22	-.30	-.09	.13
33	-.49	-.03	-.16	.44	.07	.51	-.27	.46	-.16	-.14	-.22	.19
34	-.01	-.42	.14	.14	.06	.06	-.33	-.09	.29	.35	-.26	.14
35	.07	-.24	.45	.06	-.49	.06	-.13	.31	.30	-.17	-.10	-.61
36	-.25	-.08	.42	-.03	.27	-.28	-.07	-.07	-.42	.65	-.05	.18
37	-.17	-.38	.61	.13	.14	.26	-.42	.07	.01	.62	-.35	.26
38	.77	-.34	.08	-.08	.03	-.20	-.17	-.29	.76	.02	.17	-.14
39	-.19	.85	-.32	-.14	.08	-.18	.75	-.04	-.31	-.26	-.08	.05
40	.43	.03	-.30	-.25	.05	-.14	.02	-.20	-.05	-.20	.71	.04
41	-.42	-.12	-.15	.54	-.10	.36	-.23	.55	-.14	-.31	-.17	-.12
42	.04	.09	-.46	.06	.56	-.07	-.05	-.14	.00	.14	-.15	.51
43	.70	-.33	-.11	-.32	.22	-.14	-.33	-.48	.36	.06	.56	.34
44	-.21	.84	-.39	-.06	-.05	-.19	.84	.04	-.27	-.38	-.19	-.14
45	-.22	-.47	.35	.37	-.12	.39	-.41	.27	.29	.15	-.37	-.10
46	.21	-.24	.48	-.06	.08	-.13	-.20	-.35	.15	.52	-.05	.13
47	.04	-.12	-.06	-.17	.63	-.04	-.08	-.31	.11	.47	-.11	.38
48	-.20	.09	-.20	.33	.05	.13	-.09	.11	-.12	.07	-.20	.10

(Table B-10 continued)

Item	25	26	27	28	29	30	31	32	33	34	35	36
26	.00	--										
27	.00	.00	--									
28	.00	.00	.00	--								
29	.00	.00	.00	.00	--							
30	.00	.00	.00	.00	.00	--						
31	.76	-.14	-.32	.29	-.16	-.31	--					
32	-.27	-.32	-.17	-.31	.75	.36	.00	--				
33	-.34	.06	.39	-.19	-.01	.13	.00	.00	--			
34	.10	.11	.55	.03	-.27	-.32	.00	.00	.00	--		
35	-.06	.00	-.09	.42	-.23	.11	.00	.00	.00	.00	--	
36	-.15	.32	-.11	.04	-.05	-.13	.00	.00	.00	.00	.00	--
37	-.24	.64	.35	.08	-.28	-.30	-.37	-.25	.21	.23	.05	.50
38	.55	.10	-.05	.13	-.10	-.25	.52	-.16	-.37	.14	.23	-.34
39	-.32	-.27	-.25	-.36	.68	.39	-.07	.85	-.06	-.43	-.33	-.11
40	.65	-.29	-.33	.20	-.08	-.06	.75	.00	-.23	-.25	-.28	-.07
41	-.24	-.12	.23	-.04	.07	.17	-.36	-.15	.76	-.01	.16	-.26
42	.17	.01	.27	-.61	.10	-.06	.09	.03	.03	.32	-.64	-.04
43	.73	.20	-.17	.08	-.21	-.42	.76	-.26	-.29	.00	-.24	-.14
44	-.35	-.42	-.13	-.28	.66	.52	-.15	.85	-.06	-.35	-.21	-.20
45	-.12	.07	.55	.26	-.41	-.16	-.41	-.38	.30	.61	.34	-.04
46	.20	.46	-.29	-.08	-.07	-.21	.13	-.11	-.15	.07	-.07	.35
47	.25	.22	.30	-.20	-.06	-.26	-.11	.05	.05	.39	-.38	.35
48	.04	-.23	.43	-.17	-.06	-.07	-.04	-.15	.20	.11	-.29	.13

Item	37	38	39	40	41	42	43	44	45	46	47
38	.00	--									
39	.00	.00	--								
40	.00	.00	.00	--							
41	.00	.00	.00	.00	--						
42	.00	.00	.00	.00	.00	--					
43	-.12	.57	-.27	.61	-.35	.33	--				
44	-.37	-.20	.85	-.05	-.06	.07	.00	--			
45	.41	-.03	-.47	-.47	.30	-.15	.00	.00	--		
46	.47	.30	-.11	.00	-.24	-.03	.00	.00	.00	--	
47	.29	.12	-.05	-.14	-.14	.39	.00	.00	.00	.00	--
48	.02	-.09	-.01	.07	.07	.46	.00	.00	.00	.00	.00

Note. Within-group intercorrelations set to 0.00.

Table B-11

Variance-Covariance Matrix for Group 1: Anglophones Learn French in a Unicultural Milieu

Scale	1	2	3	4	5	6
1.Motivational Intensity	1.24	1.04	0.51	0.65	0.56	0.61
2.Desire to Learn		1.46	0.57	0.88	0.71	0.77
3.Instrumental Orientation			1.07	0.51	0.26	0.47
4.Travel Orientation				1.19	0.60	0.62
5.Friendship Orientation					0.84	0.64
6.Knowledge Orientation						1.02

Table B-12

Variance-Covariance Matrix for Group 2: Anglophones Learn French in a Multicultural Milieu

Scale	1	2	3	4	5	6
1.Motivational Intensity	0.93	0.65	0.32	0.43	0.49	0.42
2.Desire to Learn		0.81	0.31	0.53	0.51	0.49
3.Instrumental Orientation			0.92	0.45	0.36	0.38
4.Travel Orientation				1.10	0.62	0.52
5.Friendship Orientation					0.90	0.55
6.Knowledge Orientation						0.86

Table B-13

Variance-Covariance Matrix for Group 3: Anglophones Learn Spanish in a Unicultural Milieu

Scale	1	2	3	4	5	6
1.Motivational Intensity	1.02	0.83	0.54	0.32	0.32	0.40
2.Desire to Learn		1.17	0.52	0.41	0.33	0.42
3.Instrumental Orientation			1.05	0.25	0.30	0.43
4.Travel Orientation				0.59	0.25	0.15
5.Friendship Orientation					0.55	0.37
6.Knowledge Orientation						0.73

Table B-14

Variance-Covariance Matrix for Group 4: Anglophones Learn Spanish in a Multicultural Milieu

Scale	1	2	3	4	5	6
1.Motivational Intensity	1.12	0.93	0.79	0.41	0.45	0.55
2.Desire to Learn		1.28	0.91	0.59	0.57	0.59
3.Instrumental Orientation			1.62	0.51	0.47	0.47
4.Travel Orientation				0.98	0.46	0.31
5.Friendship Orientation					0.91	0.40
6.Knowledge Orientation						0.80

Table B-15

Variance-Covariance Matrix for Group 5: Francophones Learn English in a Unicultural Milieu

Scale	1	2	3	4	5	6
1.Motivational Intensity	0.96	0.73	0.21	0.39	0.53	0.35
2.Desire to Learn		1.07	0.37	0.48	0.72	0.54
3.Instrumental Orientation			0.74	0.35	0.43	0.39
4.Travel Orientation				0.88	0.57	0.33
5.Friendship Orientation					1.50	0.86
6.Knowledge Orientation						1.27

Table B-16

Variance-Covariance Matrix for Group 6: Francophones Learn English in a Multicultural Milieu

Scale	1	2	3	4	5	6
1.Motivational Intensity	0.81	0.37	0.16	0.08	0.18	0.17
2.Desire to Learn		0.59	0.18	0.25	0.26	0.27
3.Instrumental Orientation			0.45	0.24	0.29	0.27
4.Travel Orientation				1.44	0.79	0.65
5.Friendship Orientation					1.23	0.78
6.Knowledge Orientation						1.27

Table B-17

Variance-Covariance Matrix for Group 7: Francophones Learn Spanish in a Unicultural Milieu

Scale	1	2	3	4	5	6
1.Motivational Intensity	1.20	0.86	0.49	0.46	0.54	0.40
2.Desire to Learn		1.05	0.45	0.46	0.66	0.52
3.Instrumental Orientation			1.80	0.25	0.38	0.33
4.Travel Orientation				0.84	0.69	0.49
5.Friendship Orientation					1.24	0.90
6.Knowledge Orientation						1.09

Table B-18

Variance-Covariance Matrix for Group 8: Francophones Learn Spanish in a Multicultural Milieu

Scale	1	2	3	4	5	6
1.Motivational Intensity	0.70	0.26	0.15	0.14	0.11	0.02
2.Desire to Learn		0.49	0.07	0.14	0.15	0.17
3.Instrumental Orientation			0.94	0.18	0.21	0.25
4.Travel Orientation				0.61	0.36	0.08
5.Friendship Orientation					0.75	0.14
6.Knowledge Orientation						0.71

Table B-19

LISREL Parameter Estimates for the Independent Groups Solution

Path	Group 1	2	3	4	5	6	7	8
Structural model: Orientation-Motivation paths'								
Instrumental	0.18*	0.05	0.31*	0.42*	0.12	0.27*	0.21*	-0.06
Travel	0.33*	0.22*	0.34*	0.17	0.26*	0.08	0.21*	0.17
Friendship	0.30*	0.29*	0.05	0.15	0.31*	0.10	0.34*	0.12
Knowledge	0.19*	0.29*	0.27*	0.35*	0.15	0.14	0.07	0.27*
Measurement model: Motivation-observed variable paths°								
Desire to Learn	1.15*	0.85*	0.95*	1.04*	1.01*	0.71*	0.98*	0.70*

'Because the orientations are each measured by one observed variable, no estimates can be calculated for the covariances between orientations, which are the same as the observed covariances (see Tables B-11 to B-18). °In order to establish the scale of measurement for the latent variable Motivation, the coefficient for Intensity of Motivation is fixed to 1.0 and therefore is not presented here (see Jöreskog, 1969).

*$p < .05$

Table B-20

LISREL Parameter Estimates for the Ethnolinguistic Group Solution

Path	Group 1	2	3	4	5	6	7	8
Structural model: Orientation covariances								
Instrumental-Travel	0.49*	0.43*	0.24*	0.48*	0.37*	0.26*	0.27*	0.19*
Instrumental-Friendship	0.27*	0.39*	0.32*	0.50*	0.42*	0.29*	0.36*	0.21*
Instrumental-Travel	0.47*	0.38*	0.43*	0.48*	0.39*	0.27*	0.33*	0.25*
Travel-Friendship	0.67*	0.70*	0.28*	0.52*	0.52*	0.71*	0.63*	0.33*
Travel-Knowledge	0.66*	0.56*	0.16*	0.33*	0.31*	0.61*	0.46*	0.08
Friendship-Knowledge	0.77*	0.66*	0.44*	0.48*	0.73*	0.67*	0.77*	0.12
Structural model: Orientation-Motivation paths[a]								
Instrumental	0.22*	0.22*	0.22*	0.22*	0.17*	0.17*	0.17*	0.17*
Travel	0.27*	0.27*	0.27*	0.27*	0.16*	0.16*	0.16*	0.16*
Friendship	0.22*	0.22*	0.22*	0.22*	0.25*	0.25*	0.25*	0.25*
Knowledge	0.26*	0.26*	0.26*	0.26*	0.14*	0.14*	0.14*	0.14*
Measurement model: Motivation-observed variable paths[b]								
Desire to Learn	1.11*	0.86*	0.98*	1.09*	1.03*	0.66*	0.86*	0.59*

[a]The parameter estimates within anglophone groups (Groups 1 to 4) and within francophone groups (Groups 5 to 8) are constrained to be equal. [b]In order to establish the scale of measurement for the latent variable Motivation, the coefficient for Intensity of Motivation is fixed to 1.0 and therefore is not presented here (see Jöreskog, 1969).
*$p < .05$

Table B-21

Comparisons of Multivariate Group Centroids on the Instrumental/Travel Variate Using Hotelling's T^2

Group	b	c	d
a. Official-unicultural	89.3*	97.2*	188.0*
b. Official-multicultural	--	213.6*	260.2*
c. Minority-unicultural		--	13.2
d. Minority-multicultural			--

*$p < .001$, df = (4,255)